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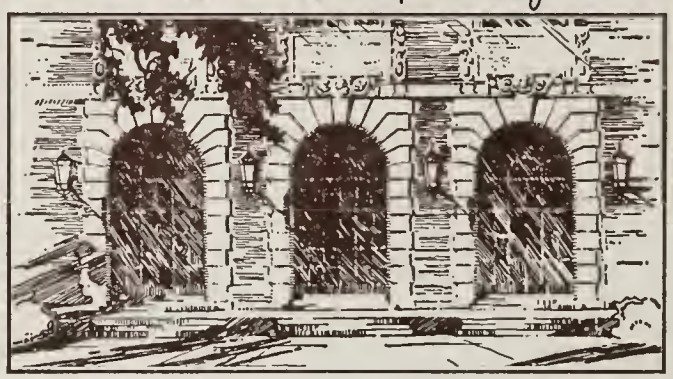

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Agricultural Trade Statistics, 1961-67

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This report was prepared in the Trade Statistics and Analysis Branch, Foreign Development and Trade Division, under the direction of Dewain H. Rahe. Thomas A. Warden, Betty Case, and Linda Tomko assisted in preparing the publication.

The European Free Trade Association (EFTA) was formed in January 1960, by Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom. Finland acceded to the EFTA Convention as an associate member in March 1961. The EFTA members agreed to eliminate trade restrictions on industrial products moving between member countries. Tariff reductions on most industrial goods began in July 1960 for the seven full members; these tariffs were eliminated on December 31, 1966. Finland's tariffs on most goods from EFTA members were reduced in stages beginning in July 1961, and are scheduled to be abolished by December 31, 1969.

In contrast to a Customs Union arrangement -- such as the European Economic Community (EEC) -- EFTA members maintain their own domestic and external trade policies. Domestic policies on agricultural production in EFTA countries vary widely from direct government payments to limited price supports. Agricultural trade has been influenced through preferences as in the U.K.-Commonwealth Agreement and Portugese-African ties. Bilateral agreements between Denmark and the other EFTA members also affect agricultural trade patterns.

EFTA's imports of agricultural products are of particular interest to the United States because the area forms the second largest market in the world for these products after the EEC. This trade grouping is also the United States' second largest customer for farm commodities. The data tabulated in this publication show EFTA's agricultural imports and exports in terms of quantities and values as well as by trading partners from 1961 through 1967, as reported by the Organization for Economic Cooperation and Development (OECD). Tables 5 through 8 exclude Finland because appropriate data were not made available to OECD prior to 1964. Total agricultural imports and imports of 12 major commodity groups for all EFTA countries except Switzerland in 1957 and 1958 were published for the years immediately preceding EFTA's formation in the June 1964 issue of Foreign Agricultural Trade of the United States. That compilation was based on reports of OECD and the United Nations and differs from data in this volume because of commodity grouping changes.

There is some distortion of EFTA's imports by country of origin owing to the transshipment of bulk commodities,

especially through Amsterdam and Rotterdam in the Netherlands. The United Kingdom's import data, for example, show the Netherlands as a source for substantial amounts of wheat, corn, soybeans, and miscellaneous grains (which include grain sorghums). Export statistics from the Netherlands indicate that none (or very small amounts) of these products went to the United Kingdom. Although EFTA's overall agricultural imports would be increasd by only a small fraction in any upward adjustment for transshipments, individual commodities and countries of origin may be affected substantially. In 1967, The United Kingdom imported about 540,000 tons more of maize from the Netherlands than the Netherlands exported to the United Kingdom. Some 520,000 tons of this amount was probably U.S. corn. To a lesser degree, other grains and oilseeds were affected. U.K. agricultural imports from the United States via the Netherlands may have been $42 million in 1967, including $28 million of corn (maize), $6 million of wheat, $7 million of soybeans, and $1 million of grain sorghums (see the annual supplement to U.S. Foreign Agricultural Trade by Countries, 1967, October 1963, pp. 90-91).

Table 1.--EFTA agricultural imports: Value by country of destination and U.S. share, 1961-67

Country	1961	1962	1963	1964	1965	1966	1967
	-- Million dollars, c.i.f. --						
Austria	253	288	298	331	383	398	352
Denmark	309	364	363	434	450	473	455
Norway	185	210	236	242	247	271	269
Portugal	160	146	178	205	237	246	252
Sweden	424	453	490	550	556	611	592
Switzerland	545	592	615	690	707	727	740
United Kingdom	5,380	5,502	5,913	6,142	5,830	5,832	5,747
Total	7,256	7,555	8,093	8,594	8,460	8,608	8,407
U.S. share:	-- Percent --						
Austria	8.8	11.2	7.3	10.3	6.6	8.8	4.5
Denmark	22.6	26.6	26.8	24.9	25.9	22.5	24.6
Norway	19.1	21.6	17.8	20.0	18.5	24.1	19.9
Portugal	13.4	17.2	10.1	15.4	9.3	12.6	8.1
Sweden	14.2	13.3	12.1	3.8	9.9	13.3	10.9
Switzerland	12.2	10.9	8.5	8.5	8.6	9.1	7.4
United Kingdom	9.3	9.2	8.4	8.4	7.9	9.0	7.9
Total	10.7	11.0	9.7	10.1	9.3	10.6	9.2

Table 2.--Finland's agricultural imports: Value by commodity and U.S. share, 1964-67

Commodity	1964	1965	1966	1967
	-- 1,000 dollars, c.i.f. --			
Live animals	53	116	229	359
Meat	1,160	2,099	10.107	1,498
Dairy products and eggs	79	103	114	122
Grains and products	16,453	19,680	11,477	14,686
Fruits, nuts, and vegetables	35,999	38,586	47,890	44,286
Sugar and related products	38,662	11,518	13,350	16,354
Coffee, cocoa, tea, and spices	51,457	48,837	54,373	56,895
Animal feeds	6,447	10,505	10,279	9,141
Miscellaneous feed preparations	3,158	2,550	3,517	3,812
Wine and malt beverages	2,765	2,606	2,928	3,281
Tobacco, unmanufactured	8,345	8,956	7,867	9,809
Hides and skins 1/	7,217	6,778	8,418	7,130
Oilseeds, oilnuts	10,732	9,630	13,649	14,778
Natural rubber and gums	3,367	4,014	6,820	4,289
Wool and animal hair 1/	3,764	3,251	3,907	3,993
Cotton and linters	8,350	10,291	13,671	8,290
Jute and other fibers	2,126	1,670	1,245	1,215
Crude animal materials	3,556	5,994	7,861	5,837
Crude vegetable materials	10,385	11,505	11,937	11,832
Animal fats and oils, excluding lard	346	404	833	382
Vegetable oils and waxes	783	907	497	346
Fats and oils, processed	959	1,247	1,374	1,129
Essential oils	401	370	404	363
Starches, casein, gelatin, glue, etc.	4,195	4,930	4,874	5,235
Total	220,788	206,614	237,673	225,123
U.S. share	22,183	23,176	24,534	17,677

1/ May include some nonagricultural commodities.

Sources: Organization for Economic Cooperation and Development (OECD), and United Nations Commodity Trade Statistics.

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Trade data of EFTA were compiled from magnetic tapes released by the Organization for Economic Cooperation and Development (OECD). For the most part, they were compiled from 3-digit Standard International Trade Classification (SITC) numbers. A few commodities, such as meat of bovine animals, meat of swine, poultry, oranges, and fresh apples were compiled from 4-digit SITC numbers, and are included in the total of the broader 3-digit classifications.

Data were compiled for the imports and exports of EFTA from 63 SITC classifications (both three and four digits) for 1961-67. The tables show trade between EFTA countries and with other principal trading nations or trading groups. The trade groups or political unions contain the following countries:

European Free Trade Association (EFTA):

Austria
Denmark
Norway
Portugal
Sweden
Switzerland
United Kingdom

European Economic Community (EEC, Common Market):

Belgium-Luxembourg
France
West Germany
Italy
The Netherlands

Eastern Europe:

USSR
East Germany
Poland
Czechoslovakia
Hungary
Rumania
Bulgaria
Albania
Yugoslavia

Other Western Europe:

Iceland
Ireland
Spain
Finland
British AOC in Europe 1/
Europe, n.e.s. 2/
Greece
Turkey

Central American Common Market (CACM):

Guatemala
Honduras
El Salvador
Nicaragua
Costa Rica

Latin American Free Trade Association (LAFTA):

Mexico
Colombia
Venezuela
Ecuador
Peru
Brazil
Bolivia
Paraguay
Chile
Argentina
Uruguay

Other Latin America:

Cuba
Haiti
Dominican Republic
Jamaica 3/
British Territories, America, n.e.s. 3/

Other Latin America--Continued:

Trinidad-Tobago 3/
British Guiana (Guyana)
Netherlands Antilles and Surinam
Panama
U.S. Dependencies-America 4/
French Antilles
French Guiana
America, n.e.s. 5/

Africa:

Burundi-Rwanda 6/
Cameroon
Congo Leo (Kinshasa)
Dahomey
Equatorial Customs Union (Gabon, Congo Bra., Chad, and Central African Republic)
French Somaliland 7/
Ivory Coast
Madagascar (Malagasy Republic)
Mali
Mauritania
Niger
Reunion (including Comoro Is.) 7/
Somalia
Senegal
Togo
Upper Volta
Union of South Africa
Morocco
Algeria
Tunisia
Libya
Egypt (UAR)
Sudan

Continued--

Africa--Continued

Spanish AOC
Gambia 6/
Guinea
Sierra Leone
Liberia
Africa, n.e.s. 5/
Ghana
Nigeria
Angola
Ethiopia
Uganda 6/
Kenya 6/
Tanzania 6/
Zanzibar 6/
Mozambique
Malawi 8/
Zambia 8/
Southern Rhodesia 8/
British AOC, Africa, n.e.s. 6/

Asia:

Japan
China (Mainland)
Afghanistan
Pakistan
India
Ceylon
Burma
Thailand
Laos
North Vietnam
Cambodia
South Vietnam
Malaysia 9/
Indonesia
Singapore 9/
Portugal, AOC Asia 10/
North Korea
South Korea
Taiwan
Hong Kong
Philippines
Far East, n.e.s. 11/
Cyprus
Syria
Lebanon
Israel
Jordan
Iraq
Saudia Arabia
Yemen
Federation of South Arabia
Kuwait
Bahrain
Iran

Oceania:

Australia
New Zealand
U.S. Dependencies Oceania 12/
British AOC Oceania 13/
French AOC Oceania 14/
Oceania, n.e.s. 5/

Other:

Ships' supplies
Miscellaneous, n.e.s.
Secret shipments
Unspecified shipments

FOOTNOTES

1/ British Associated Overseas Countries and territories in Europe, including Gibraltar, Malta, and Gozo.

2/ Includes Andorra, Vatican City, Liechtenstein, San Marino, and the customs exclaves of Baden.

3/ From 1963, Jamaica, Trinidad and Tobago, and British Guiana were shown separately. British Territories, America, n.e.s., includes Bahamas, Barbados, Bermuda, Falkland Islands and dependencies, Jamaica, Trinidad and Tobago, Leeward and Windward Islands, British Guiana (Guyana), and British Honduras.

4/ Includes Virgin Islands (St. Croix, St. John, St. Thomas) and Panama Canal Zone.

5/ Includes national code numbers not sufficiently detailed to be allocated to a specific code.

6/ In 1961 and 1962, British AOC, Africa, n.e.s. included Uganda, Kenya, Tanzania, Zanzibar, and Gambia. Beginning in 1963, These countries were reported separately. Prior to 1963, Burundi-Rwanda were not reported separately, but were a part of Congo Leopoldville.

7/ French Somaliland, Reunion, and the Comoro Islands are not African Associates through membership in the Yaoundi Agreements. French Somaliland and the Comoro Islands are territories of France, and Reunion is a Department of France.

8/ Prior to 1965, Malawi and Zambia were a part of Southern Rhodesia.

9/ From 1961 through 1965, Malaysia and Singapore data were combined; in 1966 and 1967, they were reported separately.

10/ Portugal, AOC, Asia: Macao and Timor.

11/ Far East, n.e.s. Bhutan, Brunei, Muscat (Oman), Outer Mongolia, and Nepal.

12/ U.S. Dependencies-Oceania, Midway, American Samoa, Wake, part of Nansei and Nanpo Islands, Caroline, Marshall and Marianas Islands (including Guam).

13/ British AOC-Oceania: Fiji, Tonga, and Western Pacific High Commission territories (Gilbert and Ellice Islands, Solomon Islands, Canton and Enderbury and the New Hebrides.

14/ French AOC-Oceania: New Caledonia, French Polynesia, New Hebrides (for trade with France only).

Table 3.--EFTA agricultural imports from the United States, 1961-67

SITC No.	Commodity	1961	1962	1963	1964	1965	1966	1967
		-- 1,000 dollars, c.i.f. --						
001	Live animals	158,746	145,413	158,366	182,990	155,139	169,077	155,550
01	Meats and preparations	943,115	962,232	973,553	1,172,735	1,168,366	1,191,851	1,184,280
02	Dairy products and eggs	488,721	514,953	580,561	668,039	651,988	613,879	634,362
04	Grains and products	830,816	988,938	870,738	917,228	975,886	999,577	951,456
05	Fruits, nuts, and vegetables	1,023,654	1,215,644	1,198,814	1,209,768	1,289,631	1,391,701	1,410,268
06	Sugar and related products	283,009	257,139	611,923	532,358	376,958	387,216	376,005
07	Coffee, cocoa, tea, and spices	700,013	705,359	720,931	767,577	745,925	769,753	785,773
08	Animal feeding materials	261,391	323,249	337,444	374,189	411,646	421,589	399,437
091, 099	Food preparations, miscellaneous	65,092	69,171	73,118	108,594	95,782	88,871	88,300
111	Nonalcoholic beverages	N.A.	N.A.	N.A.	2,800	3,343	4,138	5,147
112.1-112.3	Wine and malt beverages	153,952	155,534	171,806	183,844	187,210	193,667	216,037
121	Tobacco, unmanufactured	366,529	315,976	372,303	359,579	334,930	340,668	344,572
211, 212	Hides and skins 1/	173,897	173,807	215,501	227,446	222,441	265,195	211,646
221	Oilseeds, oilnuts	246,579	253,897	263,788	260,223	289,239	270,911	254,577
231.1	Natural rubber and gums	211,478	175,836	150,452	138,865	137,692	130,404	114,847
261	Silk, raw	N.A.	N.A.	11,122	9,132	8,820	10,266	12,116
262	Wool and animal hair 1/	400,071	389,906	488,392	563,669	412,202	384,865	340,006
263	Cotton and linters	286,323	267,479	268,253	291,575	263,612	250,212	223,133
264, 265	Jute and other fibers	125,436	129,029	142,367	141,549	122,808	109,996	100,793
291	Crude animal materials	81,116	81,994	93,483	95,184	104,081	109,295	103,924
292	Crude vegetable materials	131,120	139,052	143,010	156,888	165,742	172,268	177,556
411.3	Animal fats and oils, excl. lard	16,638	13,838	16,203	24,758	29,038	23,261	16,743
421, 422	Vegetable oils and waxes	140,522	124,050	124,009	141,231	172,702	168,961	159,402
431	Fats and oils, processed	19,720	18,785	20,705	25,428	28,794	31,206	33,088
551.1	Essential oils	27,954	26,268	29,254	31,117	32,831	32,499	31,169
599.5	Starches, casein, gelatin, glue, etc.	59,502	58,740	49,748	56,476	61,285	61,963	61,538

1/ May include some nonagricultural commodities.
N.A. = Not available.

Table 4.--ERIA agricultural exports, by

SITC No.	Commodity	1961	1962	1963	1964	1965	1966	1967
		-- 1,000 dollars, f.o.b. --						
001	Live animals	181,233	155,956	188,187	207,769	234,855	154,709	153,917
01	Meats and preparations	405,963	450,687	527,368	578,679	601,041	696,115	668,860
02	Dairy products and eggs	320,114	321,249	337,966	346,350	361,039	367,502	370,022
04	Grains and preparations	114,640	132,858	130,978	117,217	158,172	198,871	198,940
05	Fruits, nuts, and vegetables	68,921	76,315	82,294	85,708	95,961	114,675	121,049
061, 062	Sugar and related products	67,918	65,800	129,685	152,969	83,773	75,189	81,660
07	Coffee, cocoa, tea, and spices	54,511	58,319	62,045	64,233	73,811	80,610	84,123
08	Animal feeding materials	40,819	45,346	56,530	74,227	107,753	116,482	153,611
091-099	Food preparations, miscellaneous	46,395	47,102	52,036	56,283	60,357	70,863	70,834
112.1-112.3	Wines and malt beverages	52,322	53,692	61,113	71,587	78,471	86,687	92,737
121	Tobacco, unmanufactured	764	667	738	450	583	709	585
211.1-211.7, 212	Hides and skins 1/	97,172	106,145	111,136	129,886	146,737	175,856	154,458
221	Oilseeds and oilnuts	8,033	6,266	10,175	13,957	16,291	10,440	8,827
261	Silk, raw	910	1,222	1,540	868	698	1,502	1,664
262.1-262.6	Wool and animal hair 1/	209,399	184,661	226,289	210,617	172,634	170,418	132,759
264-265	Jute and other fibers	N.A.	N.A.	3,261	2,491	2,625	2,376	1,871
291	Crude animal materials	34,083	34,955	33,290	36,165	39,112	38,831	37,794
292	Crude vegetable materials	35,248	35,698	43,676	47,512	54,341	54,689	55,789
411.3	Animal fats and oils, excluding lard	7,479	8,914	8,316	8,836	10,528	13,529	12,035
421, 422	Vegetable oils and waxes	24,756	36,658	34,727	26,733	28,434	25,733	30,124
431	Fats and oils, processed	28,193	26,598	33,877	39,604	47,620	47,111	37,237
551.1	Essential oils	14,593	15,051	4,538	4,646	5,355	6,870	6,312
599.5	Starches, casein, gelatin, glue, etc.	23,714	26,450	18,309	20,546	21,162	22,440	23,219

1/ May include some nonagricultural commodities.
N.A. = Not available.

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
TOTAL AGRICULTURE							
WORLD	7,256,062	7,554,622	8,093,242	8,594,524	8,459,717	8,607,883	8,406,837
NORTH AMERICA	1,125,033	1,201,841	1,176,982	1,295,592	1,210,380	1,295,021	1,130,380
UNITED STATES	778,175	828,454	784,687	870,447	788,149	916,027	773,083
CANADA	346,858	373,387	392,295	425,145	422,231	378,994	357,297
EUROPE	2,491,229	2,584,540	2,780,699	3,015,262	3,130,929	3,347,003	3,483,470
EEC	934,830	981,232	1,054,458	1,158,311	1,241,130	1,263,442	1,331,308
FRANCE	210,298	196,450	242,321	302,855	281,972	278,439	309,786
GERMANY	117,310	111,626	127,187	150,403	173,862	181,302	178,542
ITALY	238,957	266,491	254,879	255,856	282,605	279,093	282,015
NETHERLANDS	309,192	339,892	350,967	375,779	414,660	435,652	469,461
EFTA	555,404	603,513	678,922	766,965	795,104	864,138	871,503
DENMARK	407,098	439,165	483,570	554,103	548,263	583,508	589,254
EASTERN EUROPE	391,156	373,421	381,412	326,993	346,508	404,655	424,349
USSR	134,114	106,160	106,134	47,007	58,088	78,249	75,806
POLAND	100,757	101,230	103,592	114,935	119,644	132,718	133,665
OTHER EUROPE	609,839	626,374	665,907	762,993	748,187	814,768	856,310
IRELAND	294,584	268,494	297,150	327,367	312,444	336,636	385,065
SPAIN	202,806	215,975	206,988	242,906	233,479	254,636	261,052
TURKEY	54,049	71,342	84,621	89,906	99,783	93,889	87,108
LATIN AMERICA	804,705	860,253	1,007,502	1,016,763	957,601	961,676	934,177
CACM	27,940	37,492	42,013	54,125	53,236	67,359	57,757
LAFTA	607,860	665,188	672,850	708,490	688,646	694,091	670,876
ARGENTINA	262,701	330,588	313,337	293,978	275,571	268,194	276,205
BRAZIL	172,256	163,517	171,600	199,595	208,638	213,067	198,368
OTHER LATIN AMERICA	168,905	157,573	292,639	254,148	215,719	200,226	205,544
BR. TERR. AM. NES	124,385	118,050	84,947	68,900	67,209	62,776	57,931
AFRICA	935,107	940,805	1,093,353	1,054,729	1,030,965	1,014,804	997,284
UNION S. AFRICA	236,275	243,376	291,197	309,624	276,284	296,950	318,975
NIGERIA	163,463	155,637	167,139	168,503	181,026	182,444	144,230
ASIA	971,399	973,594	967,348	959,603	953,031	916,244	890,363
INDIA	281,786	278,638	287,210	272,719	255,278	230,268	238,282
CEYLON	120,312	125,652	123,269	125,903	127,353	108,336	116,375
MALAYSIA INC. SINGAP	185,302	148,845	132,970	119,874	118,854	---	---
OCEANIA	928,276	993,332	1,067,002	1,252,205	1,176,520	1,072,869	970,715
AUSTRALIA	454,757	490,884	531,228	623,871	547,784	507,495	417,103
NEW ZEALAND	456,524	487,114	497,836	598,411	598,187	537,507	525,043
OTHER	313	257	356	370	291	266	448

TABLE 5 - CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 001- LIVE ANIMALS							
WORLD	158,746	145,413	158,366	182,990	155,139	169,077	155,550
NORTH AMERICA	1,165	1,261	1,908	1,698	2,593	3,312	3,441
UNITED STATES	1,004	1,108	1,790	1,506	2,443	2,838	3,271
EUROPE	157,264	143,896	155,990	180,595	151,858	165,046	151,606
EEC	4,839	6,854	5,682	7,479	5,847	5,756	5,972
FRANCE	3,040	4,925	3,841	5,277	3,405	3,819	4,004
EFTA	2,211	2,381	2,334	5,353	8,031	6,074	3,054
DENMARK	1,392	1,061	1,534	4,196	6,736	3,907	1,603
EASTERN EUROPE	6,669	8,810	10,856	8,011	9,204	18,899	7,498
POLAND	2,497	3,544	4,309	3,125	2,609	814	567
HUNGARY	2,559	3,595	5,372	3,887	5,127	8,220	2,272
OTHER EUROPE	143,545	125,851	137,118	159,752	128,776	134,317	135,082
IRELAND	143,364	125,743	136,856	159,114	128,139	133,970	134,824
LATIN AMERICA	77	125	143	178	326	295	174
CACM	---	---	---	---	---	2	3
LAFTA	76	121	140	172	316	286	162
OTHER LATIN AMERICA	1	4	3	6	10	7	9
AFRICA	43	40	63	95	98	160	119
ASIA	151	74	203	240	110	182	163
OCEANIA	22	5	44	167	149	74	27
OTHER	24	12	15	17	5	8	20

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 011- MEAT (F, C, F)							
WORLD	457,499	492,477	503,942	645,135	653,937	620,963	598,960
NORTH AMERICA	23,525	21,718	18,443	27,981	28,974	29,877	23,426
UNITED STATES	21,211	19,416	15,189	22,106	21,510	22,657	17,235
EUROPE	114,175	131,341	116,244	144,549	156,054	154,074	209,717
EEC	21,278	23,175	25,505	25,467	23,142	17,414	19,021
NETHERLANDS	14,977	13,491	15,198	15,045	14,761	8,781	12,540
EFTA	29,958	34,825	34,145	53,793	52,020	56,746	63,956
DENMARK	24,569	26,618	28,059	46,890	42,907	47,107	53,681
EASTERN EUROPE	27,280	36,028	22,977	31,170	32,490	29,999	29,451
HUNGARY	4,284	5,185	5,220	7,518	6,588	7,509	7,414
YUGOSLAVIA	13,895	25,621	13,059	16,021	10,052	11,267	5,804
OTHER EUROPE	35,659	37,313	33,617	34,119	48,402	49,915	97,289
IRELAND	33,993	35,136	31,240	31,711	46,235	48,104	90,170
LATIN AMERICA	109,752	123,380	159,477	153,992	113,570	119,876	108,079
CACM	---	---	---	---	---	---	---
LAFTA	109,582	123,379	159,466	153,989	113,570	119,876	108,079
ARGENTINA	94,949	112,194	136,910	128,569	102,874	107,697	97,942
URUGUAY	10,655	8,659	19,164	21,290	4,590	7,670	5,895
OTHER LATIN AMERICA	170	1	11	3	---	---	---
AFRICA	11,585	12,352	13,454	13,777	19,595	24,189	17,972
UNION S. AFRICA	7,024	6,621	7,429	7,596	12,368	19,546	10,709
ASIA	2,023	3,075	1,200	4,504	6,162	5,106	5,504
OCEANIA	196,414	200,601	195,119	300,337	329,567	287,837	234,255
AUSTRALIA	43,895	41,321	36,724	94,811	106,598	87,946	35,340
NEW ZEALAND	152,519	159,280	158,395	205,526	222,969	199,891	198,915
OTHER	25	10	5	-5	15	4	7

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0111 MEAT OF BOVINE ANIMALS (F, C, F)							
WORLD	188,856	203,684	208,107	291,860	281,163	263,344	247,302
NORTH AMERICA	658	665	395	2,190	3,167	2,270	1,590
EUROPE	61,415	62,203	46,538	59,093	67,105	64,126	114,068
EEC	11,213	12,955	14,110	13,705	14,527	6,946	7,729
GERMANY	3,332	3,717	3,246	2,840	3,143	1,167	1,116
NETHERLANDS	7,117	6,588	8,766	9,127	10,447	4,362	5,541
EFTA	12,302	7,727	5,393	9,823	9,398	11,206	17,130
DENMARK	11,720	6,066	3,496	8,995	6,828	9,242	14,066
EASTERN EUROPE	15,906	26,005	13,577	18,946	19,901	14,854	13,449
YUGOSLAVIA	9,480	22,403	10,529	11,906	7,577	9,197	4,492
OTHER EUROPE	21,994	15,516	13,458	16,619	23,279	31,120	75,760
IRELAND	21,994	15,504	13,345	16,537	23,240	31,113	75,433
LATIN AMERICA	91,193	106,488	136,083	133,150	91,478	95,904	87,204
CACM	---	---	---	---	---	---	---
LAFTA	91,193	106,488	136,072	133,150	91,478	95,904	87,204
ARGENTINA	78,790	96,262	115,005	109,297	83,704	85,828	78,790
BRAZIL	2,074	1,764	2,240	2,926	4,493	3,007	2,799
URUGUAY	10,329	8,462	18,825	20,913	3,266	7,065	5,345
OTHER LATIN AMERICA	---	---	11	---	---	---	---
AFRICA	10,709	11,176	12,516	12,741	18,393	22,197	16,859
UNION S. AFRICA	6,431	5,705	6,796	6,909	11,547	17,763	9,762
SO. RHODESIA	4,018	5,325	5,149	5,201	6,580	3,181	5,565
ASIA	---	---	1	---	---	27	3
OCEANIA	24,878	23,153	12,576	84,682	101,015	78,825	27,577
AUSTRALIA	19,071	19,457	11,410	66,543	77,304	62,408	18,426
NEW ZEALAND	5,807	3,696	1,166	18,139	23,711	16,417	9,151
OTHER	3	-1	-2	4	5	-5	1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0113 MEAT OF SWINE (F, C, F)							
WORLD	14,836	15,622	26,115	32,471	31,027	32,289	36,118
NORTH AMERICA	---	---	99	1,715	15	269	385
EUROPE	13,850	15,012	25,300	30,360	30,431	31,093	34,986
EEC	2,799	1,690	2,393	765	358	814	3,463
NETHERLANDS	2,796	1,689	1,265	153	79	95	3,180
EFTA	5,369	5,042	14,166	21,264	15,556	21,835	21,750
DENMARK	3,459	2,879	12,449	20,077	14,158	19,123	19,737
SWEDEN	1,439	1,857	1,138	1,092	1,243	1,920	1,702
EASTERN EUROPE	3,759	2,870	2,823	3,846	2,471	3,730	3,877
POLAND	92	175	806	194	116	283	457
HUNGARY	198	482	569	341	281	1,381	651
YUGOSLAVIA	3,449	2,202	1,414	2,733	1,576	1,292	866
OTHER EUROPE	1,923	5,410	5,918	4,485	12,046	4,714	5,896
IRELAND	1,923	5,410	5,864	4,358	11,972	4,397	1,677
FINLAND	---	---	54	127	74	314	3,821
LATIN AMERICA	339	12	358	99	5	23	190
CACM	---	---	---	---	---	---	---
LAFTA	339	12	358	99	5	23	190
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	94	185	55	34	43	754	465
ASIA	1	---	1	3	18	62	14
OCEANIA	550	412	300	263	513	89	74
NEW ZEALAND	385	399	300	263	493	89	74
OTHER	2	1	2	-3	2	-1	4

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0114 POULTRY (F, C, F)							
WORLD	9,288	9,651	23,943	30,043	28,953	28,506	26,389
NORTH AMERICA	576	1,023	5,009	3,908	2,127	2,286	1,327
UNITED STATES	574	1,023	4,992	3,903	2,104	2,270	1,327
EUROPE	8,583	8,563	18,928	26,136	26,824	26,219	25,060
EEC	1,760	1,389	7,859	9,848	7,047	8,688	6,194
FRANCE	6	25	2,936	4,423	3,406	4,187	2,819
GERMANY	433	378	442	212	92	617	315
NETHERLANDS	1,321	986	4,339	4,954	3,299	3,575	2,906
EFTA	2,556	3,592	6,942	11,585	14,582	11,659	12,691
DENMARK	2,462	3,502	6,846	11,475	14,494	11,617	12,678
EASTERN EUROPE	2,145	1,939	3,166	4,013	4,912	5,642	5,861
POLAND	221	203	364	349	1,124	1,603	1,384
CZECHOSLOVAKIA	264	243	540	539	255	365	262
HUNGARY	1,297	1,294	2,170	2,778	3,286	3,305	3,378
OTHER EUROPE	2,122	1,643	961	690	283	230	314
IRELAND	2,122	1,643	961	690	283	230	314
LATIN AMERICA	127	63	6	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	127	63	6	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	2	2	---	-1	2	1	2

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 012- MEAT DRIED, SALTED, ETC.							
WORLD	269,397	268,600	284,469	318,009	309,328	349,110	345,572
NORTH AMERICA	486	787	709	656	489	594	389
EUROPE	267,619	266,898	283,473	317,096	308,323	346,778	343,634
EEC	11,244	10,083	6,901	7,764	5,876	5,616	8,887
NETHERLANDS	10,495	9,211	5,881	6,603	4,533	4,125	7,473
EFTA	200,465	207,585	222,282	245,763	241,878	273,551	270,945
DENMARK	194,070	201,566	216,228	238,946	234,404	264,873	261,926
SWEDEN	6,359	5,982	5,967	6,770	7,435	8,629	8,998
EASTERN EUROPE	35,774	32,087	35,146	37,891	35,224	41,419	43,948
POLAND	29,289	28,412	32,694	35,281	33,416	39,752	41,744
OTHER EUROPE	20,136	17,143	19,144	25,678	25,345	26,192	19,854
IRELAND	19,875	16,876	18,793	25,326	24,872	25,830	19,582
LATIN AMERICA	154	135	207	64	85	64	35
CACM	---	1	16	7	14	14	12
LAFTA	136	114	160	43	52	25	10
OTHER LATIN AMERICA	18	20	31	14	19	25	13
AFRICA	695	505	61	162	394	1,634	1,484
ASIA	1	7	8	13	12	37	25
OCEANIA	439	269	9	15	25	1	---
OTHER	3	-1	2	3	---	2	5

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 013- MEAT CANNED, ETC.							
WORLD	216,219	201,155	185,142	209,591	205,101	221,778	239,748
NORTH AMERICA	1,825	1,863	2,222	3,340	3,203	3,793	4,090
UNITED STATES	1,609	1,513	1,914	2,519	2,676	3,483	3,745
EUROPE	131,358	120,405	117,010	140,676	140,743	152,712	155,226
EEC	52,239	47,353	47,367	59,926	60,712	67,052	64,843
FRANCE	1,914	1,930	1,905	2,170	2,260	2,275	2,775
GERMANY	4,565	3,141	2,797	3,329	2,648	3,207	2,660
ITALY	5,487	6,301	6,647	6,978	7,483	7,660	6,558
NETHERLANDS	39,775	35,513	35,538	46,726	45,388	51,689	49,577
EFTA	35,150	34,645	33,124	36,904	38,470	43,126	44,348
DENMARK	32,270	32,499	31,153	35,443	36,861	40,837	42,631
EASTERN EUROPE	33,691	31,111	29,775	36,138	33,249	32,512	35,288
POLAND	12,800	12,701	14,261	16,623	15,547	15,320	15,870
YUGOSLAVIA	17,813	15,469	12,259	16,535	14,506	13,351	15,520
OTHER EUROPE	10,278	7,296	6,744	7,708	8,312	10,022	10,747
IRELAND	9,327	6,643	6,426	7,215	7,878	9,522	9,722
LATIN AMERICA	43,537	39,945	34,922	30,417	23,652	26,617	46,564
CACM	---	---	---	---	---	---	---
LAFTA	42,933	39,914	34,921	30,417	23,652	26,616	46,564
ARGENTINA	29,388	27,643	26,661	21,003	13,685	19,064	38,107
BRAZIL	5,134	2,978	1,070	977	2,431	1,622	2,127
PARAGUAY	6,056	6,195	4,642	6,322	4,829	4,938	5,851
OTHER LATIN AMERICA	604	31	1	---	---	1	---
AFRICA	18,591	22,391	21,710	22,578	23,816	26,022	19,856
UNION S. AFRICA	3,140	3,658	4,220	6,889	7,231	12,168	8,014
KENYA	---	---	5,228	4,329	4,588	4,815	5,872
TANZANIA	---	---	5,578	6,202	6,489	8,316	5,531
SO. RHODESIA	4,219	5,637	6,542	4,956	5,068	424	175
ASIA	132	242	222	682	1,441	1,473	1,289
OCEANIA	20,768	16,303	9,051	11,893	12,238	11,151	12,720
AUSTRALIA	18,343	13,591	7,352	9,371	10,291	8,279	9,472
NEW ZEALAND	2,425	2,712	1,699	2,522	1,946	2,872	3,248
OTHER	8	6	5	5	8	10	3

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 022- MILK AND CREAM							
WORLD	30,219	31,630	37,836	53,585	52,790	44,287	51,669
NORTH AMERICA	258	285	2,427	8,559	2,298	128	32
UNITED STATES	12	130	1,962	8,319	1,885	105	20
EUROPE	22,060	23,611	26,031	31,795	32,110	34,831	38,791
EEC	8,779	9,298	8,894	10,544	10,424	10,536	11,816
BELGIUM-LUXEMBOURG	708	705	872	443	935	444	1,075
FRANCE	2,843	3,318	3,379	4,509	4,935	4,412	5,183
GERMANY	131	46	31	1,113	1,456	2,688	1,229
NETHERLANDS	5,095	5,226	4,596	4,452	3,064	2,959	4,294
EFTA	8,856	10,139	12,377	14,448	14,734	15,722	16,261
AUSTRIA	1,357	1,899	3,565	4,750	6,703	7,350	8,165
DENMARK	6,723	7,373	7,876	8,981	7,219	6,351	5,844
UNITED KINGDOM	471	571	54	25	709	1,720	1,700
EASTERN EUROPE	3	4	12	13	5	4	724
OTHER EUROPE	4,422	4,170	4,748	6,790	6,947	8,569	9,990
IRELAND	3,880	3,485	4,547	5,507	5,532	6,914	8,215
FINLAND	529	633	196	1,103	1,280	1,209	1,467
LATIN AMERICA	---	---	---	1	---	6	47
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	1	---	6	47
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	93	272	243	227	146	276	231
ASIA	4	46	---	4	16	24	68
OCEANIA	7,799	7,421	9,130	12,997	18,206	9,016	12,498
AUSTRALIA	485	826	1,410	1,601	1,711	1,402	1,466
NEW ZEALAND	7,314	6,595	7,720	11,396	16,495	7,614	11,032
OTHER	5	-5	5	2	14	6	2

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 023- BUTTER							
WORLD	303,747	333,274	385,308	454,449	421,900	401,295	405,747
NORTH AMERICA	1	---	2,578	20,520	2,424	253	198
EUROPE	139,031	140,480	169,382	194,190	199,496	196,094	208,504
EEC	23,808	15,889	22,576	25,290	28,548	25,252	40,135
FRANCE	10,771	1,547	5,838	8,580	8,301	4,806	6,828
NETHERLANDS	12,342	13,519	15,118	16,545	19,770	18,996	20,951
EFTA	81,110	91,282	101,823	112,137	115,935	111,900	104,944
DENMARK	75,600	81,391	91,538	100,182	105,232	101,892	97,023
SWEDEN	2,318	6,550	6,119	4,943	4,829	5,432	3,888
EASTERN EUROPE	14,121	14,507	15,415	18,764	21,921	23,003	25,259
POLAND	12,356	12,903	12,275	14,075	14,982	14,338	16,737
OTHER EUROPE	19,992	18,802	29,568	37,999	33,092	35,939	38,166
IRELAND	10,533	11,402	15,746	17,695	18,543	20,979	25,283
FINLAND	9,458	7,399	13,822	19,874	14,546	14,960	12,594
LATIN AMERICA	6,980	5,827	9,739	8,348	4,544	3,470	4,108
CACM	---	---	---	---	---	---	---
LAFTA	6,980	5,827	9,739	8,348	4,544	3,470	4,108
ARGENTINA	6,588	5,827	8,989	7,400	4,034	3,287	4,108
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	9,172	3,224	1,430	589	417	810	413
ASIA	---	11	124	---	531	374	223
OCEANIA	148,563	183,733	202,057	230,800	214,490	200,293	192,299
AUSTRALIA	40,062	57,326	62,648	68,380	59,736	64,383	48,852
NEW ZEALAND	108,501	126,407	139,409	162,420	154,754	135,910	143,447
OTHER	---	-1	-2	2	-2	1	2

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 024- CHEESE AND CURD							
WORLD	103,223	108,162	110,806	127,696	136,193	130,920	142,775
NORTH AMERICA	6,076	8,608	8,370	10,931	11,168	11,951	11,072
CANADA	5,587	8,163	8,107	10,766	11,017	11,742	10,639
EUROPE	35,593	37,937	45,177	51,371	55,351	62,699	70,492
EEC	17,401	19,215	22,278	24,201	27,705	31,643	35,583
FRANCE	2,982	3,606	4,334	5,975	9,481	10,653	14,478
GERMANY	947	982	1,232	1,552	1,288	1,428	1,878
ITALY	6,044	6,713	7,257	7,164	7,534	7,646	7,119
NETHERLANDS	7,420	7,893	9,408	9,404	9,276	11,819	12,012
EFTA	15,074	14,862	17,310	18,504	19,097	19,171	19,860
DENMARK	10,614	10,482	12,390	12,476	12,826	12,631	12,640
NORWAY	1,934	1,810	2,278	2,716	2,589	2,899	3,278
SWITZERLAND	2,056	2,081	2,040	2,368	2,427	2,522	2,836
EASTERN EUROPE	192	203	248	491	476	775	1,249
OTHER EUROPE	2,926	3,657	5,341	8,175	8,073	11,110	13,800
IRELAND	1,402	2,260	3,975	6,477	6,569	9,208	12,413
FINLAND	1,521	1,396	1,366	1,696	1,322	1,886	1,344
LATIN AMERICA	19	29	51	189	259	409	236
CACM	---	---	---	---	---	---	---
LAFTA	19	29	51	188	259	409	236
OTHER LATIN AMERICA	---	---	---	1	---	---	---
AFRICA	1,966	1,292	1	54	7	13	124
ASIA	190	186	264	384	386	337	390
OCEANIA	59,377	60,104	56,940	64,767	69,020	55,506	60,460
AUSTRALIA	9,171	9,270	9,598	9,944	8,737	4,709	5,855
NEW ZEALAND	50,206	50,834	47,342	54,823	60,283	50,797	54,605
OTHER	2	6	3	---	2	5	1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 025- EGGS							
WORLD	51,532	41,887	46,611	32,309	41,105	37,377	34,171
NORTH AMERICA	265	326	255	678	1,315	441	107
UNITED STATES	203	254	217	673	1,288	370	97
EUROPE	33,265	29,424	38,172	25,431	31,235	29,957	27,170
EEC	6,443	9,316	15,152	6,385	8,066	6,402	3,447
BELGIUM-LUXEMBOURG	1,713	2,817	4,478	2,068	1,855	1,119	640
FRANCE	321	288	286	685	910	1,013	926
NETHERLANDS	3,732	5,735	9,926	3,212	4,913	3,789	1,666
EFTA	8,338	6,218	8,272	4,901	5,383	5,840	6,489
DENMARK	6,890	4,697	5,720	2,947	3,033	3,185	3,818
SWEDEN	902	1,221	2,171	1,707	1,516	1,192	1,029
UNITED KINGDOM	4	4	100	143	664	1,136	1,361
EASTERN EUROPE	16,951	12,891	12,704	12,190	16,522	15,597	14,491
POLAND	12,788	9,603	8,825	7,280	9,376	7,408	6,069
CZECHOSLOVAKIA	550	354	820	966	1,273	1,400	1,046
HUNGARY	1,271	576	1,153	1,722	2,169	1,882	2,920
ROMANIA	702	1,117	1,114	1,343	1,856	1,941	1,508
BULGARIA	1,502	1,075	697	710	1,606	2,586	2,601
OTHER EUROPE	1,533	999	2,044	1,955	1,264	2,118	2,743
FINLAND	843	734	1,497	1,501	1,158	2,018	2,445
LATIN AMERICA	1,048	426	403	162	495	372	10
CACM	---	---	---	---	---	---	---
LAFTA	1,048	426	403	162	426	372	10
OTHER LATIN AMERICA	---	---	---	---	69	---	---
AFRICA	3,371	3,415	2,274	2,420	1,967	2,038	1,457
UNION S. AFRICA	3,371	3,415	2,274	2,407	1,963	2,037	1,456
ASIA	4,579	1,975	1,959	1,606	1,375	2,499	3,289
CHINA MAINLAND	2,097	954	1,320	575	859	2,171	1,919
ISRAEL	2,371	1,019	637	1,027	510	315	1,362
OCEANIA	9,005	6,321	3,549	2,014	4,711	2,067	2,127
AUSTRALIA	8,933	6,321	3,004	2,011	4,510	1,989	2,007
OTHER	-1	---	-1	-2	7	3	11

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 041- WHEAT, UNMILLED							
WORLD	368,042	386,405	371,049	378,980	404,812	403,947	374,405
NORTH AMERICA	243,262	236,119	223,310	249,479	219,279	234,059	197,710
UNITED STATES	55,291	54,622	36,768	62,665	37,371	76,289	47,650
CANADA	187,971	181,497	186,542	186,814	181,908	157,770	150,060
EUROPE	61,872	66,777	82,322	62,505	89,375	110,797	119,051
EEC	18,351	26,662	43,093	60,038	81,673	86,928	69,285
BELGIUM-LUXEMBOURG	2,946	2,403	8,729	4,847	7,015	11,522	4,139
FRANCE	8,963	20,323	27,926	41,043	40,783	30,951	20,228
NETHERLANDS	1,858	2,686	6,252	12,828	29,749	37,368	39,859
EFTA	3,098	3,460	5,999	2,437	7,676	8,653	9,189
SWEDEN	2,796	1,074	5,230	2,315	7,218	7,419	7,348
EASTERN EUROPE	33,804	35,019	29,916	21	---	7,049	27,577
USSR	30,802	31,210	29,130	---	---	---	5,277
OTHER EUROPE	6,619	1,636	3,314	9	26	8,167	13,000
LATIN AMERICA	16,394	38,057	18,809	17,575	48,382	18,220	21,080
CACM	---	---	---	---	---	---	---
LAFTA	16,350	38,028	18,809	17,575	48,382	18,220	21,053
ARGENTINA	16,350	38,028	18,809	17,575	48,280	18,217	21,053
OTHER LATIN AMERICA	44	29	---	---	---	---	27
AFRICA	---	334	1,406	136	19	---	1
ASIA	37	618	16	179	---	---	---
OCEANIA	46,477	44,496	45,183	49,104	47,755	40,870	36,561
AUSTRALIA	46,477	44,496	45,183	49,104	47,755	40,870	36,561
OTHER	---	4	3	2	2	1	2

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 042- RICE							
WORLD	26,348	32,131	33,916	30,076	33,869	39,598	39,315
NORTH AMERICA	5,323	8,094	10,403	11,811	11,626	14,256	15,452
UNITED STATES	5,313	8,094	10,403	11,810	11,622	14,256	15,452
EUROPE	12,324	14,529	12,260	8,089	8,676	7,943	13,041
EEC	12,037	14,341	11,930	7,500	8,452	7,507	11,061
GERMANY	188	534	298	282	693	644	1,398
ITALY	10,525	11,787	10,390	5,823	5,321	4,877	7,411
NETHERLANDS	1,073	1,735	1,073	1,234	1,807	1,794	1,891
EASTERN EUROPE	43	10	---	81	3	6	9
OTHER EUROPE	193	161	317	468	202	409	1,901
SPAIN	182	124	233	428	89	131	1,385
LATIN AMERICA	1,513	2,477	1,889	1,041	3,705	5,662	2,034
CACM	---	---	---	---	---	---	---
LAFTA	1,262	2,135	1,768	872	3,359	5,421	1,873
ARGENTINA	214	1,038	1,045	478	1,346	1,861	540
BRAZIL	616	8	4	2	1,628	1,916	1,017
URUGUAY	407	1,071	719	359	383	1,593	316
OTHER LATIN AMERICA	251	342	121	169	346	241	161
AFRICA	2,289	542	2,054	2,624	1,671	2,436	1,214
EGYPT	2,133	174	1,395	2,518	1,480	1,543	376
MOZAMBIQUE	67	342	645	6	84	614	736
ASIA	3,805	5,055	6,370	5,043	7,278	7,968	5,983
CHINA MAINLAND	167	176	---	198	2,068	2,766	3,024
PAKISTAN	155	322	297	561	628	1,167	917
BURMA	569	1,091	462	245	328	979	119
THAILAND	2,744	3,464	3,705	3,953	4,125	2,855	1,703
OCEANIA	1,087	1,429	934	1,463	911	1,334	1,584
AUSTRALIA	1,087	1,429	934	1,463	911	1,334	1,584
OTHER	7	5	6	5	2	-1	7

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 043- BARLEY, UNMILLED							
WORLD	83,897	83,809	64,235	84,119	85,344	83,602	85,953
NORTH AMERICA	13,889	28,754	19,013	23,470	29,952	25,229	28,068
UNITED STATES	6,281	15,681	8,078	10,714	12,126	15,244	8,158
CANADA	7,608	13,073	10,935	12,756	17,826	9,985	19,910
EUROPE	52,862	26,512	36,870	49,752	51,255	56,554	55,296
EEC	20,346	12,165	22,258	41,142	30,169	27,676	32,956
FRANCE	19,069	11,363	21,288	39,461	29,139	26,431	32,150
EFTA	5,088	5,824	5,585	5,597	6,864	20,061	14,156
DENMARK	1,538	1,375	2,019	2,955	3,727	2,506	1,028
SWEDEN	2,874	1,735	1,794	1,454	2,151	1,468	2,975
UNITED KINGDOM	664	2,321	1,770	1,185	943	16,087	10,153
EASTERN EUROPE	27,116	7,106	4,607	2,949	14,200	8,788	8,023
USSR	25,695	4,348	2,105	---	6,276	---	1,006
POLAND	452	203	321	1,020	2,127	3,678	1,406
YUGOSLAVIA	124	1,791	133	852	1,488	4,711	5,202
OTHER EUROPE	312	1,417	4,420	64	22	29	161
LATIN AMERICA	275	2,716	11	190	241	39	---
CACM	---	---	---	---	---	---	---
LAFTA	275	2,611	11	190	241	39	---
OTHER LATIN AMERICA	---	105	---	---	---	---	---
AFRICA	---	---	132	24	---	---	1
ASIA	40	14,620	3,635	2,726	1,942	---	1
SYRIA	---	5,806	2,904	2,726	1,797	---	---
IRAQ	---	8,704	233	---	145	---	---
OCEANIA	16,834	11,207	4,575	7,956	1,952	1,781	2,588
AUSTRALIA	16,834	11,207	4,575	7,956	1,952	1,781	2,588
OTHER	-3	---	-1	1	2	-1	-1

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 044- MAIZE (CORN), UNMILLED							
WORLD	222,011	313,185	262,774	277,844	283,387	297,666	299,723
NORTH AMERICA	133,688	219,296	156,023	173,034	167,554	199,450	133,533
UNITED STATES	128,934	206,407	139,438	153,974	153,868	192,105	132,930
CANADA	4,754	12,889	16,585	19,060	13,686	7,345	603
EUROPE	59,148	49,975	48,276	47,602	72,992	60,378	92,405
EEC	26,539	22,607	20,930	28,403	55,247	46,299	70,672
BELGIUM-LUXEMBOURG	2,625	3,481	4,066	2,710	5,530	4,899	4,884
FRANCE	15,432	4,349	4,783	8,015	1,980	10,742	31,209
NETHERLANDS	8,326	14,615	11,358	13,755	23,962	28,104	34,491
EASTERN EUROPE	32,207	27,262	27,337	19,159	17,681	13,569	21,691
ROMANIA	15,372	16,460	22,320	17,677	16,040	4,902	11,288
YUGOSLAVIA	6,706	1,646	2,180	396	1,325	8,527	10,318
OTHER EUROPE	322	2	6	9	34	21	19
LATIN AMERICA	8,042	10,909	8,324	9,415	20,095	30,746	27,822
CACM	---	---	---	---	---	---	---
LAFTA	8,027	10,909	8,309	9,406	20,095	30,746	27,822
ARGENTINA	7,726	10,909	6,716	9,235	6,642	11,931	19,717
MEXICO	---	---	---	---	13,134	17,512	7,730
OTHER LATIN AMERICA	15	---	15	9	---	---	---
AFRICA	21,088	32,852	50,145	47,793	22,741	7,087	45,933
UNION S. AFRICA	12,381	19,122	40,277	42,336	14,360	1,987	33,906
ANGOLA	5,997	4,507	4,489	4,596	8,179	3,277	6,087
ASIA	42	153	4	---	---	---	3
OCEANIA	---	---	---	---	8	3	33
OTHER	3	---	2	---	-3	2	-6

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 045- CEREALS, UNMILLED, NES							
WORLD	59,544	94,376	61,776	55,876	74,824	83,898	68,677
NORTH AMERICA	16,970	40,732	27,068	22,134	30,936	42,200	21,652
UNITED STATES	16,494	37,833	18,451	15,196	25,738	35,719	16,558
CANADA	476	2,899	8,617	6,938	5,198	6,481	5,094
EUROPE	14,725	14,958	14,262	9,953	19,406	22,567	20,384
EEC	4,346	6,766	4,926	6,253	12,809	13,038	10,556
BELGIUM-LUXEMBOURG	534	1,589	415	269	1,768	2,174	1,114
NETHERLANDS	1,778	4,004	2,648	3,890	8,788	9,726	7,428
EFTA	2,152	2,465	3,074	1,183	3,238	3,866	2,472
SWEDEN	1,529	1,568	1,390	702	2,478	3,311	1,755
EASTERN EUROPE	6,882	4,187	5,975	1,906	1,925	4,432	7,122
USSR	5,433	3,483	3,983	146	24	1,561	3,829
ROMANIA	244	179	64	1,018	1,296	1,830	886
OTHER EUROPE	1,345	1,540	287	611	1,434	1,231	234
LATIN AMERICA	15,642	24,406	13,314	16,410	11,660	9,327	11,760
CACM	---	---	---	---	---	---	---
LAFTA	15,635	24,406	13,314	16,388	11,660	9,327	11,760
ARGENTINA	15,626	24,405	13,247	16,336	11,656	9,225	11,132
OTHER LATIN AMERICA	7	---	---	22	---	---	---
AFRICA	8,136	6,726	1,928	5,035	9,747	5,124	8,681
UNION S. AFRICA	4,145	4,952	657	3,753	8,366	3,736	7,031
MOROCCO	1,845	1,327	1,027	1,241	1,246	1,253	1,625
ASIA	26	16	8	2	64	79	121
OCEANIA	4,043	7,538	5,194	2,345	3,007	4,608	6,068
AUSTRALIA	4,043	7,538	5,194	2,345	3,006	4,608	6,068
OTHER	2	---	2	-3	4	-7	11

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0451 RYE, UNMILLED							
WORLD	11,736	7,918	11,799	10,408	9,111	14,398	12,436
NORTH AMERICA	2,161	3,224	5,748	6,420	2,867	8,530	5,827
UNITED STATES	1,842	2,353	3,730	4,794	1,937	4,678	2,527
CANADA	319	871	2,018	1,626	930	3,852	3,300
EUROPE	7,664	4,484	6,005	2,071	3,345	5,265	6,590
EEC	964	18	47	98	342	13	173
GERMANY	959	17	36	31	336	11	9
EFTA	123	973	420	74	65	272	105
DENMARK	52	356	399	4	3	11	2
SWEDEN	55	617	11	70	62	261	103
EASTERN EUROPE	6,209	3,490	5,538	1,567	1,621	4,014	6,312
USSR	5,197	3,374	3,983	146	---	1,561	3,829
GERMANY EAST	925	2	1,467	265	227	---	---
POLAND	---	---	---	13	---	748	1,369
ROMANIA	72	---	---	917	1,146	1,700	732
OTHER EUROPE	368	3	---	332	1,317	966	---
TURKEY	---	---	---	332	1,317	966	---
LATIN AMERICA	1,868	166	49	1,917	2,899	606	18
CACM	---	---	---	---	---	---	---
LAFTA	1,868	166	49	1,895	2,899	606	18
ARGENTINA	1,868	166	49	1,895	2,899	606	18
OTHER LATIN AMERICA	---	---	---	22	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	45	42	---	---	---	---	---
OTHER	-2	2	-3	---	---	-3	1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0452 OATS, UNMILLED							
WORLD	13,985	19,678	17,256	16,002	20,390	20,043	17,537
NORTH AMERICA	3,746	7,002	8,978	5,753	8,076	9,285	3,280
UNITED STATES	3,589	5,019	2,400	446	3,827	6,683	1,486
CANADA	157	1,983	6,578	5,307	4,249	2,602	1,794
EUROPE	2,517	3,046	3,739	3,395	4,301	5,799	6,073
EEC	244	306	1,106	2,311	1,184	2,268	3,669
FRANCE	96	56	982	1,310	60	18	853
GERMANY	74	66	96	20	1,072	491	64
NETHERLANDS	73	184	28	981	52	1,753	2,752
EFTA	1,996	1,428	2,585	1,033	3,087	3,448	2,273
DENMARK	409	352	827	401	671	398	494
SWEDEN	1,474	950	1,379	632	2,416	3,050	1,652
EASTERN EUROPE	252	180	---	---	25	79	102
OTHER EUROPE	25	1,132	48	51	5	4	29
LATIN AMERICA	4,759	6,775	979	5,133	5,405	1,526	3,363
CACM	---	---	---	---	---	---	---
LAFTA	4,759	6,775	979	5,133	5,405	1,526	3,363
ARGENTINA	4,759	6,775	979	5,133	5,402	1,434	3,353
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	1	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	2,961	2,854	3,559	1,722	2,607	3,435	4,818
AUSTRALIA	2,961	2,854	3,559	1,722	2,607	3,435	4,818
OTHER	2	1	1	-2	1	-2	3

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 046- MEAL AND FLOUR OF WHEAT							
WORLD	41,584	43,771	34,176	32,123	28,176	24,622	12,724
NORTH AMERICA	30,128	30,807	25,812	25,024	22,502	19,135	8,499
UNITED STATES	5,527	4,394	1,021	1,004	1,114	1,082	845
CANADA	24,601	26,413	24,791	24,020	21,388	18,053	7,654
EUROPE	6,969	7,747	4,425	3,143	2,350	2,705	2,788
EEC	5,906	5,834	2,423	2,219	2,056	2,435	2,564
FRANCE	816	1,415	1,099	713	354	298	227
GERMANY	2,863	3,537	1,138	1,175	1,620	2,025	2,246
ITALY	1,221	317	167	255	76	72	65
EASTERN EUROPE	44	11	---	---	---	---	---
OTHER EUROPE	1,008	1,857	1,933	846	209	236	186
FINLAND	851	1,553	1,643	540	---	---	---
LATIN AMERICA	80	108	---	2	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	80	108	---	2	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	27	4	---	---	---	---	---
ASIA	4	18	4	2	2	1	2
OCEANIA	4,375	5,086	3,935	3,951	3,320	4	2
AUSTRALIA	4,375	5,086	3,935	3,951	3,320	2,775	1,431
OTHER	1	1	---	1	2	2,775	1,427
						2	2

EUROPEAN FREE TRADE ...

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 051- FRUIT AND NUTS, FRESH, DRIED							
WORLD	501,870	547,486	530,301	575,358	623,740	655,786	663,184
NORTH AMERICA	25,852	30,139	29,491	32,522	39,240	41,735	40,775
UNITED STATES	19,535	23,105	22,370	23,933	30,436	33,781	33,660
CANADA	6,317	7,034	7,121	8,589	8,804	7,954	7,115
EUROPE	219,051	238,574	217,382	249,836	259,989	277,596	277,630
EEC	109,938	110,152	111,497	116,979	131,115	133,031	147,202
FRANCE	8,400	8,797	12,326	11,881	19,624	17,535	29,341
ITALY	92,848	95,310	93,150	99,090	106,027	109,476	110,593
EASTERN EUROPE	5,245	8,719	8,074	8,643	11,342	9,032	10,162
OTHER EUROPE	100,162	115,119	93,420	119,957	111,705	129,708	115,689
SPAIN	82,025	87,964	72,222	97,123	89,429	104,619	87,385
TURKEY	13,930	21,936	16,769	17,628	16,927	19,332	21,390
LATIN AMERICA	100,728	102,144	112,571	116,701	134,574	130,811	133,362
CACM	4,798	8,628	11,472	13,477	11,740	16,970	13,797
HONDURAS	1,716	1,899	3,989	5,197	6,395	12,736	11,197
LAFTA	42,676	34,837	41,116	38,716	52,035	49,912	60,353
ARGENTINA	10,499	10,406	14,905	10,968	14,653	12,382	13,567
BRAZIL	15,257	11,148	12,379	11,243	14,298	11,400	10,740
COLOMBIA	5,823	3,026	4,593	2,035	6,135	9,412	14,659
ECUADOR	8,890	9,022	7,719	12,245	14,400	13,786	19,611
OTHER LATIN AMERICA	53,254	58,679	59,983	64,508	70,799	63,929	59,212
JAMAICA	---	---	26,112	28,126	29,206	33,439	32,755
BR. TERR. AM. NES	47,415	49,918	26,422	29,504	33,629	27,214	25,255
AFRICA	78,579	80,641	71,927	74,715	77,556	89,163	96,445
UNION S. AFRICA	51,919	59,260	52,868	59,288	61,672	72,623	76,987
MOROCCO	7,202	5,285	5,684	7,855	8,681	10,813	13,461
CAMEROUN	14,651	12,183	9,757	3,454	1,229	905	3
ASIA	45,485	55,055	64,953	61,617	70,202	73,741	77,073
CEYLON	5,697	6,790	7,248	7,264	9,012	7,472	7,038
CYPRUS	8,037	9,189	8,455	8,675	10,610	9,200	10,922
ISRAEL	29,209	33,475	44,590	38,570	42,577	49,385	51,788
OCEANIA	32,166	40,918	33,953	39,955	42,145	42,726	37,838
AUSTRALIA	25,773	32,125	29,739	31,589	34,259	33,788	26,474
NEW ZEALAND	6,393	8,793	4,196	8,316	7,884	8,934	11,364
OTHER	9	15	24	12	34	14	61

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0511 ORANGES, ETC.							
WORLD	122,093	125,516	128,543	132,718	140,994	150,410	146,095
NORTH AMERICA	1,225	1,080	1,561	1,159	2,301	3,378	4,176
UNITED STATES	1,219	1,080	1,561	1,159	2,301	3,378	4,176
EUROPE	58,811	61,074	53,277	65,385	62,859	70,355	56,110
EEC	17,913	15,055	19,710	16,369	19,562	14,883	13,748
ITALY	16,864	14,655	18,493	15,969	18,849	14,306	13,394
EASTERN EUROPE	---	1	---	3	17	---	2
OTHER EUROPE	40,895	45,995	33,551	48,999	43,278	55,397	42,360
GREECE	306	885	1,768	1,213	2,268	1,883	2,178
SPAIN	40,147	44,726	31,188	47,357	40,272	52,690	38,998
LATIN AMERICA	6,414	4,488	8,051	5,398	7,672	4,147	5,059
CACM	---	1	---	---	1	---	---
LAFTA	6,375	4,406	7,746	5,347	7,598	4,021	4,903
BRAZIL	6,118	4,384	7,431	5,240	7,436	3,966	4,863
OTHER LATIN AMERICA	39	81	305	51	73	126	156
AFRICA	27,627	27,069	24,013	26,256	28,961	30,470	34,803
UNION S. AFRICA	21,580	21,961	18,458	19,054	20,236	19,774	22,572
MOROCCO	5,573	4,619	4,740	6,163	6,893	9,238	11,057
ASIA	27,992	31,645	41,531	34,348	38,804	41,760	45,878
CYPRUS	4,396	4,049	3,828	3,898	3,963	2,733	3,962
ISRAEL	23,587	27,410	37,608	30,435	34,793	39,020	41,892
OCEANIA	25	159	107	172	392	297	63
OTHER	-1	1	3	---	5	3	6

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0512 OTHER CITRUS FRUIT							
WORLD	28,282	28,326	33,272	32,769	32,901	34,920	38,394
NORTH AMERICA	6,074	4,061	5,386	4,304	4,111	3,867	4,414
UNITED STATES	6,060	4,059	5,385	4,304	4,111	3,864	4,412
EUROPE	9,082	9,553	11,224	10,990	11,135	11,713	12,643
EEC	8,392	8,485	10,224	10,087	10,340	10,707	11,179
ITALY	7,920	8,226	9,896	9,858	10,066	10,547	10,871
EASTERN EUROPE	---	---	---	---	---	2	---
OTHER EUROPE	688	1,030	975	883	793	1,001	1,464
SPAIN	492	693	314	583	631	769	975
LATIN AMERICA	2,102	2,533	2,503	1,978	1,480	1,370	1,420
CACM	4	33	40	188	87	101	106
LAFTA	342	303	726	504	316	169	188
OTHER LATIN AMERICA	1,756	2,197	1,737	1,286	1,077	1,100	1,126
JAMAICA	---	---	664	463	635	453	629
BR. TERR. AM. NES	1,736	2,154	331	341	132	152	203
TRINIDAD TOBAGO	---	---	737	479	309	488	285
AFRICA	4,862	5,150	6,035	6,684	6,355	6,461	8,561
UNION S. AFRICA	3,821	4,229	5,196	5,710	5,366	5,049	6,804
MOROCCO	578	411	355	428	409	775	769
MOZAMBIQUE	363	299	303	364	418	425	938
ASIA	6,160	7,023	8,087	8,807	9,807	11,500	11,280
CYPRUS	1,537	1,903	1,992	1,922	3,244	2,709	3,274
ISRAEL	4,617	5,059	5,955	6,857	6,532	8,721	7,993
OCEANIA	---	7	35	7	8	5	76
OTHER	2	-1	2	-1	5	4	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0514 APPLES, FRESH							
WORLD	74,635	93,305	80,574	88,698	106,911	115,874	117,125
NORTH AMERICA	12,978	17,741	14,431	18,255	19,063	21,762	17,504
UNITED STATES	6,920	11,015	7,471	10,421	10,501	14,002	10,944
CANADA	6,058	6,726	6,960	7,834	8,562	7,760	6,560
EUROPE	17,602	20,587	13,510	15,184	24,058	25,481	31,653
EEC	15,727	18,689	12,124	13,943	20,982	23,667	29,617
FRANCE	973	483	1,315	2,033	4,361	6,367	13,505
ITALY	14,022	17,312	10,270	11,591	16,111	16,550	14,839
EASTERN EUROPE	559	378	632	653	2,504	1,342	1,119
OTHER EUROPE	324	617	257	203	334	157	416
LATIN AMERICA	9,224	8,560	12,420	8,383	11,924	11,268	11,633
CACM	---	---	5	---	---	---	---
LAFTA	9,224	8,560	12,415	8,383	11,924	11,268	11,633
ARGENTINA	8,888	8,308	12,108	7,609	11,172	9,827	11,013
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	9,484	13,405	10,880	14,258	16,388	22,861	23,438
UNION S. AFRICA	9,484	13,403	10,880	14,258	16,388	22,858	23,424
ASIA	52	206	177	33	305	151	339
OCEANIA	25,294	32,807	29,154	32,583	35,167	34,358	32,557
AUSTRALIA	19,572	24,574	25,391	24,943	28,090	26,250	21,863
NEW ZEALAND	5,722	8,233	3,763	7,618	7,077	8,108	10,694
OTHER	1	-1	2	2	6	-7	1

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0515 GRAPES, FRESH							
WORLD	64,580	71,915	42,203	49,214	51,337	56,228	56,114
NORTH AMERICA	1,603	1,514	1,228	973	989	2,604	2,356
UNITED STATES	1,603	1,514	1,228	973	989	2,604	2,356
EUROPE	50,715	55,381	28,086	33,021	35,964	36,581	36,160
EEC	27,937	30,133	10,222	13,779	13,822	15,820	17,463
BELGIUM-LUXEMBOURG	1,052	899	1,039	934	892	962	1,056
FRANCE	2,986	4,230	1,342	2,154	2,861	3,303	3,561
ITALY	22,833	23,839	7,172	10,158	9,584	11,109	12,361
NETHERLANDS	757	811	666	527	481	444	481
EASTERN EUROPE	2,028	4,707	3,625	2,390	3,851	2,227	2,172
BULGARIA	966	2,257	2,409	1,265	2,936	1,259	988
OTHER EUROPE	20,579	20,403	14,197	16,773	18,208	18,516	16,503
GREECE	1,906	2,277	907	1,085	983	739	921
SPAIN	16,018	13,712	12,585	15,198	16,363	17,039	14,748
TURKEY	2,511	4,332	637	425	821	693	778
LATIN AMERICA	707	546	832	1,147	1,164	1,045	823
CACM	---	---	1	---	---	---	---
LAFTA	705	544	831	1,147	1,164	1,045	823
ARGENTINA	404	405	733	1,043	1,102	946	685
OTHER LATIN AMERICA	2	2	---	---	---	---	---
AFRICA	9,908	12,238	10,314	11,984	10,627	12,578	13,402
UNION S. AFRICA	9,321	11,742	10,312	11,982	10,625	12,576	13,399
ASIA	1,640	2,234	1,749	2,069	2,587	3,415	3,359
CYPRUS	1,247	1,846	1,601	1,754	2,393	2,989	3,138
OCEANIA	3	---	---	19	7	3	8
OTHER	4	2	-6	1	-1	2	6

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 052- DRIED FRUIT							
WORLD	63,589	75,601	66,668	73,366	76,621	77,548	71,033
NORTH AMERICA	16,576	21,105	15,693	16,501	18,256	18,797	18,280
UNITED STATES	16,544	21,091	15,686	16,477	18,253	18,792	18,274
EUROPE	29,297	34,138	36,302	36,472	39,483	39,871	34,341
EEC	3,860	4,346	3,707	4,714	4,363	6,043	4,935
FRANCE	3,260	3,363	2,743	3,557	2,958	4,238	3,046
EASTERN EUROPE	1,022	1,687	1,480	1,593	1,363	1,635	2,072
OTHER EUROPE	24,279	27,979	30,966	30,072	33,629	32,055	27,252
GREECE	13,714	16,718	19,211	17,806	20,794	19,862	17,621
SPAIN	1,660	2,010	1,910	2,056	1,858	2,044	1,723
TURKEY	8,872	9,249	9,829	10,204	10,962	10,136	7,906
LATIN AMERICA	810	646	618	796	408	365	322
CACM	---	---	---	---	---	---	---
LAFTA	810	646	616	794	405	360	320
OTHER LATIN AMERICA	---	---	2	2	3	5	2
AFRICA	1,893	2,033	1,790	2,549	2,820	3,752	2,928
UNION S. AFRICA	1,188	1,382	1,261	1,725	1,944	2,578	2,063
ASIA	2,758	3,802	4,085	2,781	2,798	4,138	4,742
IRAQ	922	1,233	2,392	682	965	1,410	1,277
IRAN	1,723	2,386	1,567	1,884	1,592	2,228	3,120
OCEANIA	12,251	13,869	8,173	14,259	12,855	10,622	10,421
AUSTRALIA	12,251	13,869	8,173	14,259	12,855	10,622	10,421
OTHER	4	8	7	8	1	3	-1

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 053- FRUITS, PRES. AND PREPS.							
WORLD	184,572	204,969	198,758	202,706	208,948	236,484	237,362
NORTH AMERICA	30,964	41,387	33,046	28,749	29,026	29,768	29,560
UNITED STATES	29,027	36,642	29,226	26,533	26,221	26,225	24,509
CANADA	1,937	4,745	3,820	2,216	2,805	3,543	5,051
EUROPE	44,698	52,108	50,584	50,090	51,812	60,936	65,765
EEC	24,445	27,089	25,361	25,217	22,591	25,706	29,953
FRANCE	4,981	5,048	6,079	6,030	6,761	6,795	7,128
ITALY	10,876	12,336	9,974	10,820	8,921	10,130	11,760
NETHERLANDS	7,126	8,207	7,738	6,546	4,976	5,800	7,065
EFTA	2,536	2,810	3,564	4,078	4,956	5,862	6,771
EASTERN EUROPE	4,224	6,497	8,282	6,992	7,962	12,400	13,437
POLAND	1,010	1,754	2,088	1,960	2,883	4,624	5,529
OTHER EUROPE	13,493	15,712	13,377	13,803	16,303	16,968	15,604
SPAIN	11,808	13,704	11,384	11,773	13,246	14,165	13,517
LATIN AMERICA	9,457	8,019	9,020	8,904	10,510	12,652	12,292
CACM	---	---	4	7	6	---	59
LAFTA	848	674	747	766	1,084	2,040	2,356
OTHER LATIN AMERICA	8,609	7,345	8,269	8,131	9,420	10,612	9,877
JAMAICA	---	---	4,197	4,045	5,265	5,223	4,668
BR. TERR. AM. NES	8,557	7,301	1,970	2,158	1,929	3,153	3,058
AFRICA	41,575	36,858	46,399	47,479	49,020	54,192	50,071
UNION S. AFRICA	39,588	34,625	43,714	44,453	45,553	51,516	47,093
ASIA	36,086	33,034	31,367	35,991	38,517	41,896	45,673
JAPAN	14,911	11,990	10,275	12,457	11,958	11,678	12,807
MALAYSIA INC. SINGAP	7,159	7,558	5,937	5,776	6,845	---	---
PHILIPPINES	377	1,805	1,490	2,011	2,552	3,148	4,042
ISRAEL	5,749	6,167	8,540	11,889	12,764	12,708	16,266
OCEANIA	21,776	33,556	28,295	31,470	30,029	37,028	33,974
AUSTRALIA	21,763	33,379	28,166	30,935	29,541	36,529	32,622
OTHER	16	7	47	23	34	12	27

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COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 054- VEGETABLES, FRESH, FROZEN							
WORLD	222,074	324,490	326,640	281,431	301,620	330,602	340,823
NORTH AMERICA	15,032	23,301	45,967	24,311	30,438	34,093	36,343
UNITED STATES	12,797	16,779	35,451	16,374	19,257	23,712	22,260
CANADA	2,235	6,522	10,516	7,937	11,181	10,381	14,083
EUROPE	178,848	244,794	234,562	218,304	231,105	248,271	249,951
EEC	94,169	140,523	136,085	111,403	125,210	131,036	130,349
BELGIUM-LUXEMBOURG	6,603	9,606	9,120	5,478	6,282	6,329	5,591
FRANCE	9,209	12,496	9,558	10,376	10,751	12,111	13,565
GERMANY	3,988	5,445	5,759	4,229	4,048	4,665	5,139
ITALY	21,982	41,011	31,326	24,266	32,069	34,062	34,580
NETHERLANDS	52,387	71,965	80,322	67,054	72,060	73,869	71,474
EFTA	6,445	15,027	12,637	13,008	8,671	12,689	8,400
DENMARK	1,861	8,687	6,878	8,649	4,021	4,523	2,798
EASTERN EUROPE	8,553	11,924	11,485	12,288	17,773	18,730	19,093
POLAND	2,059	2,985	3,286	3,441	5,209	5,621	4,424
OTHER EUROPE	69,681	77,320	74,355	81,605	79,451	85,816	92,109
IRELAND	2,037	4,099	4,015	3,658	3,752	5,020	4,794
SPAIN	65,409	68,247	68,262	75,857	73,936	78,839	83,640
LATIN AMERICA	3,519	2,697	3,640	3,060	4,247	3,482	4,603
CACM	---	1	---	---	1	---	---
LAFTA	3,482	2,598	3,444	2,830	3,880	2,566	3,475
OTHER LATIN AMERICA	37	98	196	230	366	916	1,128
AFRICA	13,008	27,847	18,811	15,139	16,883	19,154	19,969
EGYPT	5,124	14,582	7,975	6,326	5,848	8,464	8,939
ASIA	9,779	24,108	20,298	16,382	16,580	23,567	25,386
CYPRUS	7,779	18,031	15,135	13,217	11,710	16,302	20,633
OCEANIA	1,869	1,728	3,353	4,208	2,350	2,018	4,525
OTHER	19	15	9	27	17	17	46

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COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0555 VEGETABLES, PRES. OR PREP. NES							
WORLD	36,695	43,160	59,650	61,659	62,122	72,301	73,221
NORTH AMERICA	2,930	5,342	9,563	7,660	7,627	8,670	6,670
UNITED STATES	2,501	4,229	7,091	5,964	5,424	5,942	3,750
CANADA	429	1,113	2,472	1,696	2,203	2,728	2,920
EUROPE	31,643	34,972	44,728	48,428	49,390	54,871	56,652
EEC	25,851	26,085	30,532	30,355	27,928	27,788	28,924
BELGIUM-LUXEMBOURG	562	716	905	851	805	859	999
FRANCE	1,003	1,471	1,809	1,912	2,883	3,075	2,805
ITALY	23,075	22,759	26,385	26,146	22,766	22,092	23,000
NETHERLANDS	997	941	1,171	1,090	1,147	1,253	1,647
EFTA	2,171	3,029	5,733	7,351	11,173	14,477	14,806
PORTUGAL	1,590	2,114	4,630	6,159	9,938	12,128	11,812
EASTERN EUROPE	2,178	4,171	5,056	5,494	5,800	6,759	7,326
HUNGARY	565	798	970	1,025	850	1,095	1,795
BULGARIA	1,200	2,506	3,056	3,401	3,654	4,539	3,890
OTHER EUROPE	1,443	1,687	3,407	5,228	4,489	5,847	5,596
SPAIN	1,254	1,478	3,119	4,667	3,964	5,091	4,737
LATIN AMERICA	78	127	289	590	396	448	643
CACM	---	---	---	---	---	---	---
LAFTA	---	---	62	356	287	319	509
OTHER LATIN AMERICA	78	127	227	234	109	129	134
AFRICA	1,357	1,678	2,529	2,312	1,821	2,211	2,177
UNION S. AFRICA	1,002	1,177	2,203	2,081	1,666	1,997	1,972
ASIA	483	921	2,108	2,237	2,538	5,809	6,791
CHINA FORMOSA	4	25	584	1,050	1,220	3,680	4,380
OCEANIA	202	116	426	436	349	291	277
OTHER	2	4	7	-4	1	1	11

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COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0611 RAW SUGAR							
WORLD	211,283	188,959	462,007	396,041	277,977	293,776	276,342
NORTH AMERICA	128	110	298	---	---	---	70
EUROPE	31,540	27,379	22,686	23,409	4,741	4,438	6,660
EEC	16,006	9,605	9,167	6,807	1,512	753	2,179
FRANCE	9,977	8,757	2,911	4,973	1,489	699	293
EASTERN EUROPE	12,514	13,734	13,234	14,294	3,199	3,683	4,459
POLAND	7,620	8,509	4,949	10,899	2,841	2,212	3,625
OTHER EUROPE	8	5	---	2,139	---	---	---
LATIN AMERICA	83,086	63,144	197,905	171,376	109,943	104,329	100,920
CACM	114	161	230	2,115	---	---	---
LAFTA	3,586	1,991	8,634	30,090	4,192	13,136	1,999
BRAZIL	1,907	1,297	4,367	6,386	4,068	10,563	1,091
OTHER LATIN AMERICA	79,386	60,992	189,041	139,171	105,751	91,193	98,921
CUBA	8,015	12,489	26,912	16,330	9,861	7,186	5,141
DOMINICAN REP.	17,331	596	5,110	11,445	982	---	770
JAMAICA	---	---	50,046	42,823	35,131	31,534	29,426
BR. TERR. AM. NES	54,001	47,907	50,794	31,295	25,138	26,331	23,317
TRINIDAD TOBAGO	---	---	27,227	24,303	18,924	17,721	20,913
BRIT. GUIANA	---	---	28,688	12,866	15,715	7,794	19,354
AFRICA	58,566	58,358	134,652	97,299	83,704	97,039	90,141
UNION S. AFRICA	18,256	13,001	31,612	19,962	12,852	16,621	19,910
MOZAMBIQUE	8,888	9,534	10,969	9,883	7,123	11,367	14,217
BR. AOC AFR. NES	---	32,154	86,513	62,487	57,671	63,575	52,625
ASIA	22	15	6,264	12,553	5,420	10,252	7,003
INDIA	1	1	4,758	1,266	5,420	10,252	7,003
OCEANIA	37,942	39,947	100,200	91,402	74,168	77,717	71,546
AUSTRALIA	29,538	32,270	72,240	71,021	51,277	57,460	50,176
BRIT. AOC OCEANIA	8,404	7,677	27,960	20,381	22,891	20,257	21,370
OTHER	-1	6	2	2	1	1	2

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 071- COFFEE							
WORLD	203,553	208,671	231,013	293,151	281,899	311,578	292,955
NORTH AMERICA	3,617	4,434	5,505	5,943	4,244	4,207	2,863
UNITED STATES	2,545	3,548	4,708	5,241	3,129	2,967	2,134
EUROPE	3,717	3,708	4,365	5,741	6,770	12,799	13,985
EEC	2,988	2,552	2,800	3,697	4,079	8,407	12,051
EASTERN EUROPE	---	---	---	---	705	2,008	---
OTHER EUROPE	---	35	329	525	317	244	64
LATIN AMERICA	148,911	150,243	158,713	193,371	192,977	201,959	188,168
CACM	16,457	16,653	16,588	18,627	21,070	24,562	23,883
GUATEMALA	5,962	5,974	5,611	5,828	6,002	8,404	6,086
EL SALVADOR	3,156	3,529	3,005	3,807	3,665	2,803	3,407
COSTA RICA	6,069	6,276	7,132	7,295	8,290	10,758	10,738
LAFTA	129,045	129,524	138,072	169,473	167,394	173,109	160,716
BRAZIL	102,967	103,408	111,717	131,869	130,197	134,979	127,279
COLOMBIA	22,197	21,753	22,606	33,624	32,262	31,471	28,284
OTHER LATIN AMERICA	3,409	4,066	4,053	5,271	4,513	4,288	3,569
HAITI	2,483	2,896	2,642	3,114	3,319	2,893	2,252
AFRICA	36,773	41,633	51,859	68,464	62,157	74,342	71,301
ANGOLA	6,885	7,884	9,711	15,637	12,522	12,600	12,293
ETHIOPIA	2,657	3,047	2,961	2,766	3,404	2,787	2,674
UGANDA	---	---	11,765	9,395	20,090	25,949	29,707
KENYA	---	---	17,958	19,094	12,423	13,550	15,169
TANZANIA	---	---	4,174	4,020	4,868	7,315	5,506
BR. AOC AFR. NES	71	24,330	43	6	16	---	---
ASIA	10,518	8,558	10,488	19,215	14,944	17,073	14,783
INDIA	4,541	1,748	1,707	4,460	2,510	1,839	2,601
INDONESIA	4,570	5,256	6,689	10,139	9,722	12,146	9,236
OCEANIA	23	94	69	409	807	1,200	1,855
OTHER	-6	1	14	8	---	-2	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 072- COCOA							
WORLD	123,105	121,793	119,615	110,392	102,144	110,360	127,959
NORTH AMERICA	197	83	418	334	386	319	188
EUROPE	37,449	32,462	32,594	34,704	30,325	30,751	34,539
EEC	35,350	31,570	31,523	32,871	29,341	30,100	33,398
FRANCE	2,728	1,705	1,273	864	1,281	840	159
ITALY	7,388	5,524	4,836	3,716	4,598	3,959	3,675
NETHERLANDS	24,780	24,014	24,788	26,893	22,101	23,185	28,598
EASTERN EUROPE	---	---	36	484	52	93	27
OTHER EUROPE	1,087	23	343	125	40	3	139
LATIN AMERICA	14,898	12,737	9,377	7,844	9,329	14,067	14,507
CACM	27	18	21	32	5	12	22
LAFTA	12,738	10,240	7,159	6,403	8,078	12,356	11,826
BRAZIL	9,681	7,255	4,500	3,858	5,847	9,886	8,565
ECUADOR	1,406	1,555	1,117	1,241	1,167	1,202	1,729
VENEZUELA	1,651	1,426	1,531	1,301	1,059	1,260	1,513
OTHER LATIN AMERICA	2,133	2,479	2,197	1,409	1,246	1,699	2,659
AFRICA	68,702	73,823	75,097	65,356	58,526	59,268	73,594
GHANA	41,768	46,175	44,799	35,899	33,959	33,094	41,895
NIGERIA	22,364	23,941	26,176	27,434	20,678	23,967	29,657
ANGOLA	1,004	942	1,111	1,354	1,165	1,267	1,471
ASIA	282	336	306	744	2,063	3,670	1,708
OCEANIA	1,575	2,347	1,823	1,404	1,511	2,280	3,417
AUSTRALIA	706	886	1,129	937	967	1,833	2,519
OTHER	2	5	---	6	4	5	6

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 073- CHOCOLATE AND PREPS.							
WORLD	24,834	26,759	25,930	31,144	32,258	38,495	44,808
NORTH AMERICA	118	69	62	83	83	147	230
EUROPE	24,658	26,562	25,705	30,783	31,745	37,935	44,210
EEC	5,281	5,421	5,278	6,218	6,541	7,280	8,809
BELGIUM-LUXEMBOURG	396	357	300	334	422	447	497
FRANCE	251	230	337	355	330	334	433
GERMANY	1,797	1,981	1,868	2,202	2,347	2,666	2,815
ITALY	640	871	865	965	1,003	1,217	2,119
NETHERLANDS	2,197	1,982	1,908	2,362	2,439	2,616	2,945
EFTA	4,092	5,242	5,630	6,444	7,847	10,360	12,738
DENMARK	258	349	555	704	988	1,174	1,603
NORWAY	157	198	418	429	653	940	1,053
SWEDEN	385	963	925	992	945	1,170	1,468
SWITZERLAND	2,541	2,732	2,680	2,991	3,878	4,904	5,665
UNITED KINGDOM	578	858	899	1,149	1,213	1,944	2,643
EASTERN EUROPE	354	272	248	304	544	812	1,198
OTHER EUROPE	14,931	15,627	14,549	17,817	16,813	19,483	21,465
IRELAND	14,906	15,559	14,498	17,657	16,173	18,249	19,721
FINLAND	25	67	51	159	639	1,232	1,744
LATIN AMERICA	---	79	48	127	266	142	28
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	3	---
OTHER LATIN AMERICA	---	79	48	127	266	139	28
AFRICA	23	1	2	2	---	20	29
ASIA	26	50	102	132	145	235	297
OCEANIA	1	2	9	7	14	16	15
OTHER	8	-4	2	10	5	---	-1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 074- TEA AND MATE							
WORLD	332,499	333,986	329,042	317,793	313,506	289,935	301,330
NORTH AMERICA	30	16	48	16	29	19	41
EUROPE	6,572	3,510	4,070	6,457	8,927	6,510	8,614
EEC	4,775	1,522	2,240	4,244	6,501	4,142	6,228
NETHERLANDS	4,213	984	1,792	3,409	5,788	3,664	5,330
EASTERN EUROPE	10	24	19	37	6	18	27
OTHER EUROPE	6	26	6	22	12	56	325
LATIN AMERICA	2,292	1,597	2,291	2,075	3,543	2,762	1,493
CACM	---	---	---	---	---	---	---
LAFTA	2,291	1,596	2,290	2,075	3,543	2,762	1,493
OTHER LATIN AMERICA	1	1	1	---	---	---	---
AFRICA	31,317	33,795	31,912	31,940	34,125	46,558	41,232
KENYA	---	---	10,188	12,621	12,839	19,739	13,955
MOZAMBIQUE	6,521	6,370	5,171	4,630	5,558	7,222	8,325
MALAWI	---	---	---	1	6,517	8,942	8,364
SO. RHODESIA	11,373	9,880	8,529	7,938	183	---	---
ASIA	292,282	295,065	290,711	277,287	266,879	234,085	249,952
INDIA	176,135	171,055	175,103	164,590	146,082	130,694	143,526
CEYLON	101,657	110,860	105,480	105,122	107,131	93,341	101,185
INDONESIA	5,998	3,605	4,329	2,278	3,632	2,110	1,954
OCEANIA	---	---	7	17	3	---	---
OTHER	6	3	3	1	---	1	-2

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 075- SPICES							
WORLD	16,022	14,150	15,331	15,097	16,118	19,385	18,721
NORTH AMERICA	310	421	503	423	516	574	759
UNITED STATES	287	394	446	388	476	486	612
EUROPE	2,864	2,901	3,012	3,514	4,079	5,827	5,716
EEC	1,346	1,244	1,054	1,324	1,460	2,543	1,743
FRANCE	312	307	265	218	218	258	258
GERMANY	407	405	331	454	494	617	543
ITALY	176	167	144	291	361	348	242
NETHERLANDS	450	357	308	355	359	675	418
EASTERN EUROPE	923	924	1,014	1,133	1,415	1,283	1,497
HUNGARY	486	518	544	580	561	612	639
BULGARIA	117	168	236	230	354	345	429
OTHER EUROPE	493	612	823	891	1,054	1,828	2,226
SPAIN	443	571	790	844	997	1,747	2,132
LATIN AMERICA	2,253	1,886	2,476	2,547	2,876	3,326	2,874
CACM	197	158	352	391	694	1,030	832
GUATEMALA	197	158	352	391	694	1,030	831
LAFTA	712	444	321	313	427	542	550
BRAZIL	666	425	293	305	372	502	523
OTHER LATIN AMERICA	1,344	1,284	1,803	1,843	1,755	1,754	1,492
JAMAICA	---	---	1,050	1,108	902	1,208	933
BR. TERR. AM. NES	1,344	1,279	680	644	801	489	500
AFRICA	1,339	1,540	1,766	1,873	1,732	1,811	1,754
SIERRA LEONE	109	130	154	403	87	73	316
NIGERIA	147	257	660	364	410	447	117
MADAGASCAR	308	206	170	282	359	384	387
BR. AOC AFR. NES	4	634	203	137	186	263	244
ASIA	9,007	7,215	7,402	6,545	6,744	7,616	7,388
CHINA MAINLAND	166	162	149	193	367	439	429
INDIA	2,440	2,160	1,519	1,364	1,148	1,385	1,616
CEYLON	152	163	187	171	316	278	220
MALAYSIA INC. SINGAP	5,009	3,701	4,580	2,865	3,102	---	---
MALAYSIA	---	---	---	---	---	2,508	1,800
INDONESIA	944	787	604	1,640	1,381	1,861	1,865
SINGAPORE	---	---	---	---	---	838	971
PORT AOC ASIA	124	95	216	189	245	180	304
OCEANIA	235	177	149	183	168	231	212
OTHER	14	10	23	12	3	---	18

TABLE 3--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 081- ANIMAL FEEDS							
WORLD	261,391	323,249	337,444	374,189	411,646	421,589	399,437
NORTH AMERICA	27,042	45,074	50,010	49,482	66,775	62,652	49,868
UNITED STATES	11,303	18,597	21,544	20,288	27,744	28,621	22,482
CANADA	15,739	26,477	28,466	29,194	39,031	34,031	27,386
EUROPE	87,221	88,897	106,731	120,015	137,501	174,419	184,454
EEC	23,980	28,085	41,131	46,600	47,561	62,160	60,799
FRANCE	3,279	3,216	6,640	6,816	6,552	7,447	7,006
GERMANY	14,127	15,814	25,262	30,792	31,433	41,258	37,082
ITALY	1,805	4,308	3,591	2,777	3,407	5,973	6,503
NETHERLANDS	3,983	4,129	4,527	5,131	4,867	6,455	8,392
EFTA	23,031	24,228	32,429	42,754	51,970	52,340	63,925
DENMARK	9,811	14,684	17,874	20,923	22,918	21,956	23,842
NORWAY	12,022	6,930	9,166	16,551	23,974	23,555	31,702
EASTERN EUROPE	23,771	15,356	7,950	2,396	3,175	16,207	15,261
USSR	23,079	14,413	7,287	1,454	2,090	13,471	12,257
OTHER EUROPE	16,439	21,228	25,221	28,265	34,795	43,712	44,469
ICELAND	5,439	6,697	8,181	11,698	14,114	19,992	14,444
IRELAND	2,395	3,002	3,642	3,660	4,284	5,327	8,013
TURKEY	8,290	11,300	13,089	12,566	15,845	17,744	20,662
LATIN AMERICA	44,162	60,575	53,525	66,604	62,956	58,506	51,144
CACM	1,533	2,370	2,859	3,037	4,394	4,774	6,616
LAFTA	39,017	54,599	48,874	60,857	57,255	50,924	41,431
ARGENTINA	20,594	29,097	22,410	32,843	26,121	29,664	23,199
PERU	12,010	17,736	16,475	17,851	19,131	12,015	9,392
OTHER LATIN AMERICA	3,612	3,606	1,792	2,710	1,307	2,808	3,097
AFRICA	40,888	50,049	48,637	64,128	71,780	68,229	70,077
UNION S. AFRICA	9,656	20,106	14,854	19,547	21,604	20,563	24,220
SENEGAL	3,237	2,453	3,873	4,827	6,624	5,139	3,956
NIGERIA	7,341	9,316	10,543	16,909	20,401	19,250	17,591
ASIA	60,820	76,205	77,238	72,115	71,538	57,326	43,055
INDIA	33,069	41,867	42,740	36,774	43,092	33,507	24,252
BURMA	16,365	19,049	19,214	16,370	10,014	5,336	3,970
SYRIA	2,316	3,356	3,618	5,561	4,702	4,759	1,720
OCEANIA	1,252	2,441	1,283	1,840	1,090	457	828
OTHER	6	8	20	5	6	---	11

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0812 BRAN, POLLARD AND SHARPS							
WORLD	23,450	30,152	26,051	31,640	22,724	16,820	18,412
NORTH AMERICA	1,747	3,415	901	1,701	2,674	2,054	1,930
UNITED STATES	1,219	914	118	343	521	118	40
CANADA	528	2,501	783	1,358	2,153	1,936	1,890
EUROPE	7,951	6,840	12,784	7,397	5,302	4,952	5,293
EEC	445	842	9,449	5,917	3,767	3,606	4,137
FRANCE	7	---	364	768	621	449	300
GERMANY	181	650	8,355	4,584	2,826	3,032	3,327
EFTA	126	291	305	339	591	944	306
DENMARK	125	154	287	339	590	571	306
EASTERN EUROPE	6,257	4,251	1,998	564	145	63	275
USSR	6,184	4,144	1,948	564	---	---	7
OTHER EUROPE	1,123	1,456	1,032	577	799	339	575
IRELAND	696	1,006	1,011	519	336	315	241
LATIN AMERICA	3,240	8,425	1,175	7,093	1,470	1,016	1,021
CACM	---	---	---	---	---	---	---
LAFTA	2,890	8,084	875	6,912	1,258	720	662
ARGENTINA	2,881	8,084	875	6,912	1,255	710	662
OTHER LATIN AMERICA	350	341	300	181	212	296	359
AFRICA	4,385	4,881	5,747	6,664	5,645	5,026	5,466
UNION S. AFRICA	1,055	2,063	1,785	2,739	2,119	1,941	2,229
ALGERIA	802	53	283	593	565	339	177
SENEGAL	101	1,232	1,075	422	97	74	30
NIGERIA	---	468	1,197	1,068	1,816	2,050	2,290
ANGOLA	342	481	436	169	243	317	144
ASIA	5,319	5,799	5,260	8,026	7,632	3,773	4,262
INDIA	2,105	2,749	2,029	2,221	3,465	3,081	2,782
BURMA	3,195	2,964	3,199	5,409	4,035	618	1,006
OCEANIA	806	791	179	761	---	---	439
AUSTRALIA	806	791	179	761	---	---	439
OTHER	2	1	5	-2	1	-1	1

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0813 OILSEED CAKE AND MEAL							
WORLD	177,528	212,876	226,997	235,502	265,219	272,988	244,441
NORTH AMERICA	20,800	35,476	43,799	40,063	53,348	48,315	37,109
UNITED STATES	7,686	14,799	18,722	17,433	24,241	24,911	18,877
CANADA	13,114	20,677	25,077	22,630	29,107	23,404	18,232
EUROPE	47,120	48,055	48,638	56,361	62,441	87,110	91,284
EEC	16,151	18,822	20,402	30,181	32,826	44,413	40,177
GERMANY	12,346	13,420	14,889	23,923	26,247	34,684	29,431
ITALY	1,011	3,204	2,529	2,186	2,713	5,332	5,457
EFTA	5,737	8,057	9,678	12,176	11,301	10,616	16,637
DENMARK	4,755	7,571	8,494	10,803	10,532	9,618	11,198
EASTERN EUROPE	17,022	10,388	5,652	1,389	2,535	13,975	13,365
USSR	16,638	10,080	5,318	785	2,090	13,469	12,236
OTHER EUROPE	8,210	10,788	12,906	12,615	15,779	18,106	21,105
TURKEY	7,790	10,484	12,580	12,302	15,391	17,693	20,324
LATIN AMERICA	27,891	32,633	33,839	36,790	38,814	42,504	36,929
CACM	1,533	2,370	2,859	3,037	4,394	4,774	6,616
LAFTA	24,908	28,774	29,741	31,574	33,754	35,486	27,749
ARGENTINA	17,073	20,254	20,070	23,271	22,316	27,434	21,783
OTHER LATIN AMERICA	1,450	1,489	1,239	2,179	666	2,244	2,564
AFRICA	26,185	26,527	28,263	38,143	46,555	42,041	40,676
SENEGAL	2,939	1,207	2,708	4,405	6,527	5,065	3,926
NIGERIA	7,341	8,846	9,346	15,839	18,585	16,889	15,299
UGANDA	---	---	2,728	3,892	4,281	4,096	3,105
TANZANIA	---	---	2,322	3,767	4,408	4,757	4,634
ASIA	55,226	69,760	71,754	63,526	63,481	52,922	38,367
PAKISTAN	1,724	2,409	2,738	2,384	2,999	3,440	3,918
INDIA	30,920	39,017	40,618	34,422	39,552	30,294	21,258
BURMA	13,170	16,085	16,015	10,961	5,979	4,718	2,964
INDONESIA	1,381	946	732	3,926	3,963	3,266	4,222
PHILIPPINES	2,516	2,789	3,633	3,252	3,127	2,485	1,974
SYRIA	2,290	3,264	3,586	5,192	4,585	4,757	1,550
IRAN	2,291	3,614	2,633	1,858	1,882	3,178	1,809
OCEANIA	300	429	700	621	582	97	71
OTHER	6	-4	4	-2	-2	-1	5

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0814 MEAT AND FISH MEAL							
WORLD	41,834	54,734	58,335	78,885	93,676	94,227	95,718
NORTH AMERICA	1,861	2,373	1,206	2,021	3,574	2,593	1,867
CANADA	1,101	1,921	1,054	1,749	3,313	2,517	1,767
EUROPE	19,805	17,902	25,884	37,886	50,741	57,587	57,869
EEC	815	852	2,228	2,058	2,800	3,255	2,816
EFTA	13,434	10,222	15,089	23,770	33,292	33,507	39,356
DENMARK	3,655	4,938	6,242	7,410	9,411	9,535	10,094
NORWAY	9,646	5,130	8,409	16,045	23,070	22,828	28,541
EASTERN EUROPE	41	41	43	35	37	18	19
OTHER EUROPE	5,515	6,787	8,524	12,023	14,612	20,807	15,678
ICELAND	5,383	6,625	8,159	11,675	14,112	19,987	14,444
LATIN AMERICA	11,260	16,952	17,656	20,355	20,044	13,739	12,796
CACM	---	---	---	---	---	---	---
LAFTA	9,985	15,595	17,656	20,355	20,044	13,700	12,708
ARGENTINA	388	425	1,251	977	714	731	715
CHILE	301	1,477	2,133	3,161	1,578	1,889	2,662
PERU	9,240	13,626	14,228	16,185	17,584	10,976	9,309
OTHER LATIN AMERICA	1,275	1,357	---	---	---	39	88
AFRICA	8,739	16,401	13,224	18,019	18,792	19,906	22,996
UNION S. AFRICA	7,621	15,313	12,389	16,392	17,453	17,753	21,007
ANGOLA	998	1,014	679	1,425	1,122	1,835	1,677
ASIA	46	59	81	269	186	310	57
OCEANIA	128	1,044	281	331	337	91	133
OTHER	-5	3	3	4	2	1	---

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 091- MARGARINE AND SHORTENING							
WORLD	48,316	47,865	50,425	81,362	62,613	52,407	42,674
NORTH AMERICA	34,494	34,371	39,261	64,648	32,980	15,905	15,699
UNITED STATES	34,368	34,343	39,222	58,227	32,922	15,683	15,671
CANADA	126	28	39	6,421	58	222	28
EUROPE	13,774	13,466	11,059	15,688	29,626	36,313	26,945
EEC	8,205	7,074	6,077	10,744	20,770	20,637	14,988
BELGIUM-LUXEMBOURG	1,174	2,215	1,330	3,778	12,211	11,149	8,030
FRANCE	4,486	2,408	2,110	1,864	2,185	2,063	1,428
GERMANY	654	1,196	1,513	1,778	1,309	2,077	1,741
ITALY	5	3	2	16	2,404	1,836	83
NETHERLANDS	1,886	1,252	1,122	3,308	2,661	3,512	3,706
EFTA	4,251	4,285	4,070	4,552	6,416	6,901	5,245
DENMARK	2,204	2,198	1,963	1,754	3,460	3,959	2,804
NORWAY	1,714	1,564	1,579	1,792	2,106	1,816	1,850
EASTERN EUROPE	1,075	1,829	381	---	1,973	8,181	6,413
POLAND	1,063	1,826	350	---	1,323	4,274	2,154
ROMANIA	---	3	29	---	620	3,470	3,650
OTHER EUROPE	243	278	531	392	467	594	299
LATIN AMERICA	4	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	4	---	---	---	---	---	---
ASIA	29	2	1	618	---	---	1
OCEANIA	10	7	2	66	5	172	8
OTHER	1	14	100	344	1	12	14
	4	5	2	-2	1	5	7

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0913 LARD, ETC.							
WORLD	45,527	45,140	46,807	66,831	59,186	48,900	39,635
NORTH AMERICA	34,414	34,328	39,120	58,200	32,938	15,792	15,648
UNITED STATES	34,331	34,300	39,117	58,200	32,880	15,583	15,620
EUROPE	11,082	10,808	7,683	8,629	26,247	32,938	23,979
EEC	7,535	6,250	4,696	6,082	19,538	19,394	13,986
BELGIUM-LUXEMBOURG	1,131	2,140	1,032	1,905	12,104	11,027	7,917
FRANCE	4,480	2,408	2,093	1,822	2,152	2,010	1,365
GERMANY	285	836	940	1,112	536	1,304	1,250
ITALY	5	3	---	14	2,402	1,835	82
NETHERLANDS	1,634	863	631	1,229	2,344	3,218	3,372
EFTA	2,400	2,633	2,424	2,267	4,358	5,072	3,339
DENMARK	2,110	2,163	1,934	1,747	3,453	3,950	2,790
EASTERN EUROPE	1,075	1,826	381	---	1,973	8,181	6,413
POLAND	1,063	1,826	350	---	1,323	4,274	2,154
ROMANIA	---	---	29	---	620	3,470	3,650
OTHER EUROPE	72	99	182	280	378	291	241
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	29	2	---	---	---	---	1
ASIA	---	---	---	1	---	164	1
OCEANIA	---	---	3	1	1	5	---
OTHER	2	2	1	---	---	1	6

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 1121 WINE OF FRESH GRAPES							
WORLD	122,707	125,399	140,293	150,156	147,834	154,830	170,578
NORTH AMERICA	10	16	25	45	20	59	29
EUROPE	112,936	116,515	130,067	138,340	136,623	144,591	159,554
EEC	70,085	71,343	82,039	88,510	85,095	91,650	97,489
FRANCE	43,747	46,117	52,723	58,908	52,280	58,473	63,133
GERMANY	6,407	5,534	6,272	6,160	6,615	6,695	7,317
ITALY	19,873	19,640	22,929	23,293	25,972	26,251	26,937
EFTA	10,764	11,093	9,887	11,557	13,919	13,497	15,662
PORTUGAL	10,658	10,945	9,727	11,283	13,628	13,185	15,160
EASTERN EUROPE	2,564	2,727	3,132	2,566	2,313	2,539	3,097
OTHER EUROPE	29,523	31,352	35,009	35,707	35,296	36,905	43,306
SPAIN	28,485	30,193	33,682	34,455	33,757	35,490	41,464
LATIN AMERICA	79	176	228	221	157	273	201
CACM	---	---	---	---	1	---	---
LAFTA	79	176	222	221	156	273	200
OTHER LATIN AMERICA	---	---	6	---	---	---	1
AFRICA	6,130	5,562	6,272	7,340	6,401	5,323	6,019
UNION S. AFRICA	4,824	3,784	4,691	5,738	4,901	3,662	4,462
ASIA	1,345	1,326	2,014	2,265	2,569	2,896	3,252
CYPRUS	1,223	1,192	1,876	2,092	2,389	2,779	3,065
OCEANIA	2,209	1,799	1,683	1,938	2,064	1,679	1,523
AUSTRALIA	2,209	1,799	1,683	1,938	2,064	1,677	1,523
OTHER	-2	5	4	7	---	9	---

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 1123 BEER							
WORLD	30,810	29,364	31,417	33,436	39,047	38,456	44,564
NORTH AMERICA	3	1	10	28	3	16	9
EUROPE	30,711	29,233	31,260	33,243	38,879	38,299	44,426
EEC	2,429	2,306	3,128	3,888	8,076	5,900	7,177
GERMANY	808	862	1,446	1,861	4,188	2,758	3,137
NETHERLANDS	1,368	1,199	1,483	1,757	3,463	2,741	3,478
EFTA	7,407	6,704	7,322	7,787	8,565	10,699	13,505
DENMARK	7,275	6,554	7,070	7,482	7,398	10,328	13,068
EASTERN EUROPE	141	165	202	270	400	380	433
OTHER EUROPE	20,734	20,058	20,608	21,298	21,838	21,320	23,311
IRELAND	20,732	20,057	20,608	21,296	21,718	20,883	22,890
LATIN AMERICA	40	60	66	83	62	31	15
CACM	---	---	---	---	---	---	---
LAFTA	1	---	---	---	---	3	1
OTHER LATIN AMERICA	39	60	66	83	62	28	14
AFRICA	2	---	2	7	7	30	5
ASIA	1	6	6	4	9	9	6
OCEANIA	49	59	72	68	82	72	99
OTHER	4	5	1	3	5	-1	4

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 121- TOBACCO, UNMANUFACTURED							
WORLD	366,529	315,976	372,303	359,579	334,930	340,668	344,572
NORTH AMERICA	216,485	172,614	209,563	207,986	170,905	235,418	234,607
UNITED STATES	189,474	145,382	184,012	178,526	141,484	202,235	191,092
CANADA	27,011	27,232	25,551	29,460	29,421	33,183	43,515
EUROPE	19,612	20,646	23,046	30,385	28,568	28,177	23,531
EEC	5,952	7,404	7,569	13,987	12,421	10,333	8,503
NETHERLANDS	2,466	4,697	4,733	11,077	7,694	6,284	2,871
EASTERN EUROPE	2,617	3,423	4,571	3,340	3,900	4,441	5,231
OTHER EUROPE	10,758	9,713	10,856	13,008	12,212	13,402	9,770
GREECE	7,227	6,790	6,329	8,864	7,755	5,964	6,355
TURKEY	3,517	2,916	4,523	4,143	4,417	4,310	3,410
LATIN AMERICA	6,284	6,163	5,882	8,510	9,000	7,101	9,340
CACM	---	---	1	6	3	3	12
LAFTA	5,166	5,409	4,538	7,400	7,323	5,459	7,183
BRAZIL	4,535	4,530	3,588	6,242	6,020	4,281	6,464
OTHER LATIN AMERICA	1,118	754	1,343	1,104	1,674	1,639	2,145
AFRICA	84,143	75,956	92,190	76,669	83,715	33,862	25,424
MALAWI	---	---	---	221	7,633	8,663	8,419
SO. RHODESIA	81,149	72,413	88,298	72,128	58,919	12,489	1,704
ASIA	40,000	40,602	41,447	35,937	42,687	36,034	51,511
INDIA	26,633	24,614	25,642	21,930	25,104	22,132	33,417
INDONESIA	12,112	14,417	13,507	11,999	15,079	10,475	8,955
OCEANIA	---	---	172	90	56	68	150
OTHER	5	-5	3	2	-1	8	9

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 211- HIDES AND SKINS, CRUDE							
WORLD	87,431	80,711	83,579	101,209	93,975	98,375	75,282
NORTH AMERICA	8,034	4,382	5,654	12,227	9,494	8,268	5,791
UNITED STATES	6,002	3,652	4,862	10,446	7,525	7,078	4,633
CANADA	2,032	730	792	1,781	1,969	1,190	1,158
EUROPE	36,533	34,584	34,884	38,896	41,605	43,284	36,276
EEC	18,379	15,448	14,904	17,736	19,787	19,202	13,842
FRANCE	3,298	1,838	1,968	2,419	2,461	2,291	2,359
GERMANY	6,406	6,579	6,395	7,974	7,743	7,902	5,717
ITALY	4,817	3,647	3,738	3,951	3,602	3,366	2,276
NETHERLANDS	3,496	2,990	2,577	3,087	5,494	5,091	3,161
EFTA	11,934	13,494	11,869	10,917	11,030	13,101	11,914
DENMARK	4,543	5,601	4,727	4,672	4,270	4,951	5,181
NORWAY	2,365	2,323	2,008	1,803	2,407	2,199	1,799
SWEDEN	1,552	1,882	1,968	1,585	1,837	2,408	1,449
SWITZERLAND	1,917	1,423	1,270	1,161	1,238	1,779	1,569
UNITED KINGDOM	1,377	1,841	1,656	1,427	1,026	1,545	1,754
EASTERN EUROPE	204	225	409	796	1,205	810	442
OTHER EUROPE	6,016	5,417	7,702	9,447	9,583	10,171	10,078
ICELAND	1,159	967	1,279	1,384	1,507	1,698	1,296
IRELAND	2,542	1,675	2,849	3,380	3,497	4,843	5,110
SPAIN	1,088	1,149	1,605	2,209	1,478	1,189	1,115
FINLAND	940	1,374	1,529	1,576	2,578	2,159	2,288
LATIN AMERICA	8,566	9,758	8,786	6,631	5,679	6,417	4,567
CACM	5	---	11	6	---	---	---
LAFTA	8,350	9,547	8,523	6,437	5,484	6,208	4,453
ARGENTINA	5,833	7,206	6,305	3,581	2,540	3,139	2,377
BRAZIL	783	980	873	1,281	1,637	2,088	1,235
OTHER LATIN AMERICA	211	211	252	188	195	209	114
AFRICA	17,539	16,134	17,144	20,020	17,563	20,917	14,976
UNION S. AFRICA	6,891	6,308	6,853	8,184	6,576	8,169	5,349
NIGERIA	2,808	2,454	2,763	3,182	2,628	3,476	2,166
ETHIOPIA	2,158	2,363	2,247	2,601	2,569	3,274	2,438
KENYA	---	---	1,871	2,111	1,815	1,979	1,338
TANZANIA	---	---	1,100	946	1,484	1,606	1,399
ASIA	5,227	4,936	5,309	5,984	4,284	4,296	2,506
PAKISTAN	2,673	1,886	1,880	1,743	603	300	131
OCEANIA	11,511	10,908	11,787	17,428	15,349	15,183	11,159
AUSTRALIA	6,503	6,268	7,467	10,751	6,617	6,196	4,099
NEW ZEALAND	5,007	4,639	4,320	6,675	8,732	8,987	7,060
OTHER	21	9	15	23	1	10	7

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 221- OILSEEDS, ETC.							
WORLD	246,579	253,897	263,788	260,223	289,239	270,911	254,577
NORTH AMERICA	69,056	85,612	89,189	97,712	112,716	102,684	106,294
UNITED STATES	36,090	56,014	66,132	72,311	81,201	73,702	82,963
CANADA	32,966	29,598	23,057	25,401	31,515	28,982	23,331
EUROPE	4,176	5,257	7,194	6,950	10,385	15,944	15,905
EEC	1,983	2,523	3,089	3,523	4,857	9,666	9,090
NETHERLANDS	1,150	973	1,628	1,629	2,126	6,384	7,158
EASTERN EUROPE	1,502	1,589	2,292	1,925	3,759	4,594	5,393
OTHER EUROPE	439	556	703	390	414	548	491
LATIN AMERICA	2,197	1,702	2,899	1,330	3,415	1,457	4,433
CACM	470	226	597	6	668	45	1
LAFTA	1,706	1,284	2,302	1,324	2,180	1,409	4,417
OTHER LATIN AMERICA	21	192	---	---	567	3	15
AFRICA	111,347	115,122	121,488	106,511	112,365	100,323	89,343
UNION S. AFRICA	4,475	3,958	4,894	6,995	2,143	1,533	4,820
SUDAN	6,961	12,392	12,449	4,545	5,780	2,610	4,781
SIERRA LEONE	6,114	6,012	5,152	4,638	4,570	3,453	1,962
NIGERIA	63,536	64,157	72,869	65,828	75,754	58,865	46,915
ANGOLA	9,426	9,053	8,773	9,843	7,247	5,436	4,754
MOZAMBIQUE	5,522	4,737	4,336	3,695	3,317	3,216	3,453
ASIA	44,491	34,723	29,270	37,078	36,972	38,293	29,936
CHINA MAINLAND	12,278	7,113	452	8,447	4,160	5,882	9,039
INDONESIA	4,121	1,598	1,958	7,754	6,613	1,899	2,430
PHILIPPINES	20,180	12,848	20,334	15,512	22,688	25,824	16,077
OCEANIA	15,306	11,476	13,745	10,633	13,390	12,209	8,657
AUSTRALIA	7,455	5,813	7,362	6,994	9,346	7,663	5,001
BRIT. AOC OCEANIA	6,432	4,443	5,155	2,892	3,644	3,795	3,514
OTHER	6	5	3	9	-4	1	9

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2211 PEANUTS, GREEN							
WORLD	66,018	68,158	63,358	56,992	60,503	60,903	67,529
NORTH AMERICA	1,004	1,750	6	736	1,891	3,593	2,501
UNITED STATES	928	1,653	6	736	1,854	3,593	2,443
EUROPE	1,063	1,377	587	748	722	910	1,013
EEC	559	719	289	549	448	691	836
EASTERN EUROPE	345	275	---	2	---	---	---
OTHER EUROPE	134	342	291	188	258	209	126
LATIN AMERICA	447	790	955	758	2,254	1,243	850
CACM	---	---	---	---	---	---	---
LAFTA	447	790	955	758	1,752	1,240	841
MEXICO	282	633	759	747	774	923	509
OTHER LATIN AMERICA	---	---	---	---	502	3	9
AFRICA	55,873	56,961	57,808	50,559	51,929	51,048	59,400
UNION S. AFRICA	4,240	3,395	4,536	6,930	2,104	1,400	4,740
SUDAN	177	477	3,094	1,413	3,161	1,595	2,685
SENEGAL	1,528	---	---	---	1,041	6,114	2,961
GAMBIA	---	---	850	802	2,319	4,454	4,968
NIGERIA	34,245	38,342	38,364	30,652	33,881	26,524	30,968
ANGOLA	6,118	5,779	5,786	5,481	3,180	2,640	2,554
MALAWI	---	---	---	19	3,387	4,241	5,913
SO. RHODESIA	1,888	2,761	3,694	3,440	52	1	---
BR. AOC AFR. NES	5,803	4,781	4	2	---	---	---
ASIA	7,606	7,259	3,999	4,189	3,705	4,116	3,756
CHINA MAINLAND	74	87	---	326	2,253	2,970	2,955
INDIA	2,460	3,844	2,825	2,611	9	1	13
ISRAEL	1,456	1,343	858	670	616	795	580
OCEANIA	23	21	---	3	---	---	9
OTHER	2	---	3	-1	2	-7	---

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2212 COPRA							
WORLD	45,055	29,912	40,894	39,099	46,449	43,789	30,628
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	62	150	126	4	---	---	---
EEC	---	---	---	4	---	---	---
EASTERN EUROPE	1	---	---	---	---	---	---
OTHER EUROPE	---	---	1	---	---	---	---
LATIN AMERICA	21	20	---	---	61	---	---
CACM	---	8	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	21	12	---	---	61	---	---
AFRICA	6,558	5,384	4,742	5,266	3,942	4,184	3,982
ANGOLA	857	832	766	1,220	1,205	890	845
MOZAMBIQUE	5,050	4,230	3,610	3,262	2,641	2,943	2,827
ASIA	23,134	12,904	22,290	23,201	29,291	27,402	18,003
MALAYSIA INC. SINGAP	2,603	705	218	---	---	---	---
INDONESIA	3,069	816	1,647	7,673	6,598	1,578	1,925
PHILIPPINES	17,462	11,370	20,334	15,512	22,688	25,824	16,077
OCEANIA	15,282	11,455	13,738	10,626	13,157	12,201	8,642
AUSTRALIA	7,431	5,793	7,355	6,988	9,345	7,662	4,991
NEW ZEALAND	1,419	1,219	1,228	746	168	750	142
BRIT. AOC OCEANIA	6,432	4,443	5,155	2,892	3,644	3,789	3,509
OTHER	-2	-1	-2	2	-2	2	1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2213 PALM NUTS AND KERNELS							
WORLD	34,859	31,933	36,613	36,018	42,269	33,608	18,865
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	74	---	---	---
EEC	---	---	---	---	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	74	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	34,052	31,069	35,846	35,867	41,956	32,958	17,265
SIERRA LEONE	6,114	6,012	5,119	4,592	4,553	3,453	1,962
NIGERIA	25,087	21,454	27,904	28,178	34,452	27,474	13,637
ANGOLA	1,946	2,204	1,899	2,692	2,584	1,592	855
ASIA	805	864	769	77	314	651	1,601
OCEANIA	---	---	---	---	---	---	---
OTHER	2	---	-2	---	-1	-1	-1

TABLE 5--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2214 SOYBEANS							
WORLD	57,273	70,215	76,097	85,305	94,540	87,828	100,628
NORTH AMERICA	44,181	61,695	71,731	76,410	90,336	80,600	87,216
UNITED STATES	34,953	54,177	64,882	69,150	78,520	68,472	78,825
CANADA	9,228	7,518	6,849	7,260	11,816	12,128	8,391
EUROPE	41	21	686	267	868	4,413	5,471
EEC	40	21	684	266	867	4,410	5,471
NETHERLANDS	2	2	656	219	771	4,379	5,035
EASTERN EUROPE	1	---	---	---	---	---	---
OTHER EUROPE	---	---	2	---	---	---	---
LATIN AMERICA	---	180	684	---	---	---	3,493
CACM	---	---	---	---	---	---	---
LAFTA	---	---	684	---	---	---	3,493
OTHER LATIN AMERICA	---	180	---	---	---	---	---
AFRICA	941	1,542	2,995	1,024	1,807	1,835	660
NIGERIA	836	1,478	2,995	1,015	1,807	1,835	658
ASIA	12,109	6,775	---	7,601	1,530	972	3,783
CHINA MAINLAND	12,109	6,775	---	7,600	1,528	969	3,781
OCEANIA	---	---	---	---	---	6	5
OTHER	1	2	1	3	-1	2	---

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2216 COTTONSEED							
WORLD	11,896	16,364	14,981	9,436	9,619	4,690	2,880
NORTH AMERICA	---	---	---	2	1	2	---
EUROPE	375	139	9	---	12	1	1
EEC	---	---	---	---	8	1	---
EASTERN EUROPE	167	71	---	---	---	---	---
OTHER EUROPE	208	68	9	---	---	---	1
LATIN AMERICA	470	218	597	6	668	83	---
CACM	470	218	597	6	668	45	---
GUATEMALA	125	---	597	6	---	---	---
NICARAGUA	322	218	---	---	668	---	---
LAFTA	---	---	---	---	---	38	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	10,395	14,582	12,966	8,182	7,366	3,776	2,549
SUDAN	6,782	11,805	9,065	2,938	2,461	638	1,062
IVORY COAST	246	188	471	193	716	570	330
TOGO	237	151	229	120	110	134	129
DAHOMEY	85	59	105	173	69	196	33
NIGERIA	2,157	1,603	1,707	4,109	2,764	1,293	453
ETHIOPIA	133	232	241	71	---	74	---
MOZAMBIQUE	199	273	672	122	366	230	263
ASIA	653	1,425	1,409	1,247	1,570	827	329
SYRIA	82	657	115	---	---	---	---
ISRAEL	---	---	---	87	193	579	231
YEMEN	89	205	112	201	230	41	---
FED. SOUTH ARABIA	474	563	1,182	959	1,146	207	97
OCEANIA	---	---	---	---	---	---	---
OTHER	3	---	---	-1	2	1	1

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2217 CASTOR OIL SEEDS							
WORLD	1,998	3,016	4,389	2,898	1,455	4,185	4,417
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	---	13	11	72
EEC	---	---	---	---	13	11	72
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	107	172	130	411	254	18	42
CACM	---	---	---	---	---	---	---
LAFTA	107	172	130	411	252	18	42
ECUADOR	68	51	41	375	191	---	28
PERU	39	121	89	36	23	18	14
OTHER LATIN AMERICA	---	---	---	---	2	---	---
AFRICA	1,858	2,488	4,189	2,311	1,159	3,025	2,387
UNION S. AFRICA	204	539	302	---	---	---	---
SUDAN	---	107	155	14	---	370	802
NIGERIA	138	117	94	24	15	43	5
UGANDA	---	---	110	78	86	82	89
KENYA	---	---	1,104	927	559	809	418
TANZANIA	---	---	2,379	1,216	442	1,705	1,025
BR. AOC AFR. NES	---	1,658	---	---	---	---	---
ASIA	34	356	71	176	30	1,132	1,917
CHINA MAINLAND	---	---	---	---	---	1,132	1,917
THAILAND	25	356	---	159	30	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	-1	---	-1	---	-1	-1	-1

IMPORTS OF AGRICULTURAL COMMODITIES

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 262- WOOL AND HAIR							
WORLD	498,174	473,586	556,918	567,952	464,396	444,130	394,814
NORTH AMERICA	12,762	7,346	9,149	3,511	5,567	6,860	5,641
UNITED STATES	12,175	6,798	8,373	2,886	5,250	6,651	5,529
EUROPE	96,524	88,104	116,017	100,326	86,864	84,761	69,156
EEC	45,562	43,023	57,310	49,155	41,125	41,554	35,863
BELGIUM-LUXEMBOURG	10,245	10,918	12,791	10,912	9,602	9,247	7,937
FRANCE	22,524	20,009	27,545	23,349	18,134	18,481	15,328
GERMANY	7,504	6,761	9,224	8,705	7,822	7,831	6,865
EFTA	27,020	25,824	30,304	31,604	25,348	24,750	20,440
UNITED KINGDOM	22,881	21,181	24,242	25,516	19,429	19,722	15,683
EASTERN EUROPE	3,365	3,101	5,260	4,061	2,896	4,943	3,448
OTHER EUROPE	20,577	16,156	23,143	15,506	17,495	13,514	9,405
IRELAND	10,044	9,558	10,930	8,118	9,858	7,565	5,198
TURKEY	9,198	5,386	9,379	4,512	5,978	3,998	2,774
LATIN AMERICA	79,779	66,239	73,192	71,252	71,077	84,481	86,031
CACM	---	---	---	---	---	---	---
LAFTA	76,709	63,631	69,855	67,456	67,947	81,074	82,799
ARGENTINA	30,527	32,571	28,425	25,410	24,656	34,485	27,801
URUGUAY	34,947	22,674	31,610	26,419	33,992	34,993	40,889
OTHER LATIN AMERICA	3,070	2,608	3,337	3,796	3,130	3,407	3,232
AFRICA	39,900	36,862	43,536	50,854	43,479	37,820	32,100
UNION S. AFRICA	38,371	35,267	41,784	49,269	42,369	37,064	31,360
ASIA	22,824	22,571	29,543	39,229	32,534	26,769	18,708
CHINA MAINLAND	6,081	6,920	13,025	17,688	18,197	13,831	8,274
PAKISTAN	7,172	8,473	9,111	7,330	5,411	4,811	4,151
INDIA	6,767	5,400	4,299	9,007	4,530	4,188	2,990
OCEANIA	246,357	252,453	285,480	302,758	224,865	203,446	183,171
AUSTRALIA	142,825	149,642	177,621	184,397	129,912	108,974	113,149
NEW ZEALAND	103,532	102,811	107,859	118,361	94,948	94,472	70,022
OTHER	28	11	1	22	10	-7	7

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2631 RAW COTTON EXCLUDING LINTERS							
WORLD	280,014	260,789	260,848	284,603	257,716	243,627	216,634
NORTH AMERICA	111,112	61,246	54,942	77,243	50,377	39,565	38,502
UNITED STATES	111,112	61,246	54,942	77,243	50,377	39,543	38,502
EUROPE	12,468	28,843	38,285	46,378	55,103	51,496	40,596
EEC	971	1,740	1,622	1,696	1,412	2,353	1,631
EASTERN EUROPE	4,644	5,225	3,835	5,182	11,258	13,103	10,980
USSR	3,992	4,904	3,769	5,182	10,521	13,093	10,349
OTHER EUROPE	6,801	21,793	32,797	39,003	41,965	35,965	27,949
TURKEY	6,415	16,326	27,339	33,635	39,656	32,927	24,619
LATIN AMERICA	52,960	78,167	66,450	64,108	62,550	69,177	49,466
CACM	3,721	8,349	7,768	14,415	12,995	18,585	10,583
GUATEMALA	1,070	2,169	3,475	4,068	2,676	7,923	5,197
NICARAGUA	2,504	5,544	4,162	10,225	9,552	9,913	5,237
LAFTA	48,861	69,210	58,278	49,052	48,990	50,004	38,866
ARGENTINA	2,062	7,345	6,048	752	635	739	1,351
BRAZIL	12,464	15,564	12,049	12,866	12,720	10,698	6,916
COLOMBIA	3,822	6,209	3,330	2,409	4,686	2,319	7,766
MEXICO	9,301	17,247	13,196	6,284	11,149	13,378	6,490
PERU	20,535	22,645	22,602	25,624	19,119	22,606	16,148
OTHER LATIN AMERICA	378	608	404	641	565	588	17
AFRICA	78,309	64,512	77,238	67,578	67,247	59,822	72,468
EGYPT	9,542	9,158	12,490	14,280	14,556	11,803	14,926
SUDAN	23,048	20,999	21,156	15,676	11,797	8,214	13,360
NIGERIA	10,921	6,772	10,580	5,165	3,336	3,972	2,780
ANGOLA	3,044	2,474	3,692	1,878	2,941	3,171	4,098
MOZAMBIQUE	26,368	18,221	22,555	18,288	23,237	17,647	23,698
ASIA	25,162	28,007	23,933	29,288	22,440	23,557	15,602
PAKISTAN	1,282	1,763	4,091	8,084	4,220	4,527	3,734
SYRIA	7,335	7,672	5,527	1,937	3,270	1,918	996
FED. SOUTH ARABIA	2,602	2,539	2,796	4,644	2,400	3,068	1,916
IRAN	11,253	13,090	8,199	12,310	10,447	11,380	5,701
OCEANIA	---	15	---	---	---	5	1
OTHER	3	-1	---	8	-1	5	-1

IMPORTS OF AGRICULTURAL

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 265- VEGETABLE FIBERS EXC. COTTON AND JUTE							
WORLD	73,187	76,162	97,034	99,344	75,879	63,243	52,069
NORTH AMERICA	136	8	38	2	12	44	12
EUROPE	24,954	27,237	30,472	30,843	28,761	24,563	18,014
EEC	18,645	20,828	23,712	25,444	23,318	17,511	13,956
BELGIUM-LUXEMBOURG	13,268	15,008	17,559	19,385	16,527	13,697	10,468
FRANCE	1,441	2,112	2,051	2,593	3,841	2,138	2,171
ITALY	1,701	1,448	1,711	1,224	989	256	316
NETHERLANDS	1,595	1,877	1,947	1,772	1,520	1,026	703
EASTERN EUROPE	5,825	5,988	6,291	4,999	4,822	6,376	3,647
USSR	4,743	4,736	3,985	3,802	3,528	4,783	2,548
OTHER EUROPE	97	51	72	37	116	184	128
LATIN AMERICA	1,639	2,304	3,413	4,017	3,206	3,224	3,780
CACM	---	---	---	---	---	---	---
LAFTA	1,618	2,299	3,408	3,951	3,120	3,181	3,426
BRAZIL	1,489	2,134	2,920	3,921	3,119	3,179	3,410
OTHER LATIN AMERICA	21	5	5	66	86	43	354
AFRICA	32,198	32,786	48,017	46,579	29,853	25,488	18,923
ANGOLA	5,925	7,093	10,220	9,691	7,049	6,568	5,047
KENYA	---	---	8,571	4,171	2,765	2,684	1,690
TANZANIA	---	---	25,533	28,499	17,475	13,526	10,428
MOZAMBIQUE	1,529	814	1,935	2,277	1,847	2,034	1,458
BR. AOC AFR. NES	110	23,994	215	199	213	131	5
ASIA	14,249	13,825	15,093	17,898	14,041	9,914	11,319
INDIA	261	1,295	1,649	2,001	1,011	478	903
CEYLON	3,633	2,434	2,566	3,715	3,764	2,706	2,662
THAILAND	907	1,780	718	859	2,390	1,004	3,023
PHILIPPINES	7,881	7,203	8,673	9,627	6,199	4,919	3,688
OCEANIA	---	---	---	---	---	---	5
OTHER	1	2	1	5	6	10	16

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2921 PLANTS FOR DYEING, ETC.							
WORLD	16,127	18,471	1,319	2,415	2,820	2,469	1,633
NORTH AMERICA	420	624	3	47	15	18	17
UNITED STATES	346	492	2	47	15	16	17
EUROPE	12,482	14,355	144	254	303	125	100
EEC	10,190	12,042	81	110	203	46	47
BELGIUM-LUXEMBOURG	765	912	4	---	---	---	---
FRANCE	1,098	1,363	26	43	29	8	4
GERMANY	1,217	1,290	19	34	74	30	40
ITALY	3,193	3,629	29	33	100	3	3
NETHERLANDS	3,917	4,848	3	---	---	5	---
EFTA	801	934	12	8	12	2	2
DENMARK	497	643	---	---	---	---	---
EASTERN EUROPE	725	798	3	4	2	5	---
HUNGARY	265	186	2	1	---	2	---
OTHER EUROPE	766	581	48	132	86	72	51
SPAIN	387	385	11	21	23	11	5
TURKEY	326	146	37	111	63	61	46
LATIN AMERICA	857	728	180	414	680	578	387
CACM	81	114	---	---	---	---	---
LAFTA	775	604	178	409	656	574	373
BRAZIL	286	292	---	19	65	5	26
PERU	244	117	170	333	501	503	347
OTHER LATIN AMERICA	1	10	2	5	24	4	14
AFRICA	625	442	34	19	29	10	22
ASIA	1,675	2,251	948	1,673	1,792	1,729	1,101
CHINA MAINLAND	89	566	239	412	456	526	372
INDIA	998	1,326	632	953	1,042	904	543
LEBANON	4	61	47	238	200	219	115
OCEANIA	69	64	3	4	1	3	---
OTHER	-1	7	7	4	---	6	6

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 411- ANIMAL OILS AND FATS							
WORLD	64,150	54,672	64,156	87,635	95,510	75,796	71,939
NORTH AMERICA	11,699	6,235	14,225	20,228	20,924	13,216	9,776
UNITED STATES	7,493	5,180	10,983	13,613	15,674	9,679	5,878
CANADA	4,206	1,055	3,242	6,615	5,250	3,537	3,898
EUROPE	26,168	21,234	29,092	37,227	48,806	50,215	51,741
EEC	9,789	6,876	9,892	8,330	7,597	6,755	4,478
GERMANY	5,457	4,764	6,116	6,295	6,401	5,439	3,942
NETHERLANDS	3,579	1,731	3,374	1,655	722	999	208
EFTA	11,384	8,098	8,509	13,510	25,393	30,996	34,365
DENMARK	2,173	1,886	3,693	6,990	13,646	10,606	10,745
NORWAY	7,611	3,736	2,419	4,097	8,005	17,058	20,809
SWEDEN	760	1,429	974	1,273	1,382	1,303	948
UNITED KINGDOM	551	618	1,235	709	993	931	999
EASTERN EUROPE	134	45	1,695	1,892	2,886	3,455	2,567
USSR	---	---	1,579	1,652	2,794	3,288	2,461
OTHER EUROPE	4,861	6,215	8,996	13,495	12,930	9,009	10,331
ICELAND	3,375	5,014	7,688	12,005	10,959	7,148	8,241
IRELAND	1,466	1,190	1,261	1,444	1,891	1,813	1,931
LATIN AMERICA	7,526	8,050	4,645	3,504	3,302	1,293	2,727
CACM	---	---	---	---	---	---	---
LAFTA	5,726	8,050	4,645	3,504	3,302	1,293	2,727
PERU	5,367	7,729	4,344	3,142	3,204	865	2,513
OTHER LATIN AMERICA	1,800	---	---	---	---	---	---
AFRICA	9,814	7,440	5,171	11,414	10,121	5,119	5,171
UNION S. AFRICA	9,700	7,406	5,131	11,401	10,071	5,087	5,128
ASIA	5,282	5,208	6,324	7,153	4,450	363	212
JAPAN	5,281	5,208	6,323	7,092	4,425	360	207
OCEANIA	3,657	6,507	4,698	8,107	7,906	5,591	2,309
AUSTRALIA	1,016	3,594	2,712	3,827	3,893	2,464	1,088
NEW ZEALAND	2,641	2,913	1,986	4,280	4,013	3,127	1,221
OTHER	4	-2	1	2	1	-1	3

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 4113 ANIMAL OILS, FATS, EXC. LARD							
WORLD	16,638	13,838	16,203	24,758	29,038	23,261	16,743
NORTH AMERICA	6,452	2,381	5,914	9,951	12,952	9,224	6,882
UNITED STATES	2,438	1,487	2,790	5,090	8,722	5,833	3,615
CANADA	4,014	894	3,124	4,861	4,230	3,391	3,267
EUROPE	6,370	5,388	6,093	7,070	8,520	8,181	7,619
EEC	3,426	2,735	2,824	3,027	4,019	3,051	2,750
GERMANY	2,775	2,456	2,510	2,670	3,176	2,560	2,304
EFTA	1,324	1,409	1,865	2,345	2,752	3,105	2,829
DENMARK	673	630	694	878	859	1,439	1,298
NORWAY	33	20	183	327	407	344	317
SWEDEN	174	218	549	619	775	718	595
UNITED KINGDOM	421	498	430	486	679	581	598
EASTERN EUROPE	134	45	116	237	123	223	106
OTHER EUROPE	1,486	1,199	1,288	1,461	1,626	1,802	1,934
IRELAND	1,465	1,188	1,243	1,395	1,589	1,768	1,893
LATIN AMERICA	265	158	291	328	57	428	214
CACM	---	---	---	---	---	---	---
LAFTA	265	158	291	328	57	428	214
ARGENTINA	219	130	275	317	41	426	214
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	11	16	29	35	25	12	15
ASIA	111	229	136	275	519	267	147
JAPAN	111	229	136	217	495	265	144
OCEANIA	3,429	5,665	3,739	7,097	6,965	5,148	1,867
AUSTRALIA	856	2,827	1,762	3,079	3,051	2,077	686
NEW ZEALAND	2,573	2,838	1,977	4,018	3,914	3,071	1,181
OTHER	---	1	1	2	---	1	-1

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 421- FIXED VEGETABLE OILS, SOFT							
WORLD	51,977	45,592	47,998	59,880	86,989	87,979	85,642
NORTH AMERICA	6,844	5,687	6,990	7,376	9,589	6,798	4,085
UNITED STATES	2,139	928	1,810	4,319	4,541	1,902	308
CANADA	4,705	4,759	5,180	3,057	5,048	4,896	3,777
EUROPE	21,841	21,828	21,699	26,743	31,904	32,676	39,652
EEC	8,987	6,921	6,205	6,732	8,895	10,069	10,609
FRANCE	524	493	790	543	1,877	2,110	2,438
GERMANY	3,932	3,079	2,465	3,063	4,708	5,566	4,108
ITALY	1,431	1,153	790	1,055	989	934	987
NETHERLANDS	2,226	1,241	1,435	1,710	975	1,211	2,983
EFTA	4,571	5,986	4,894	4,578	4,956	4,104	3,088
DENMARK	4,042	4,765	3,341	3,803	3,736	3,306	2,526
EASTERN EUROPE	4,130	4,912	7,022	9,854	9,566	14,504	20,604
USSR	990	939	2,475	3,120	4,652	7,595	10,992
HUNGARY	1,208	1,893	2,801	3,428	3,332	3,980	4,014
ROMANIA	1,502	1,830	1,734	3,110	1,511	2,433	2,876
OTHER EUROPE	4,153	4,009	3,578	5,579	8,487	3,999	5,351
SPAIN	3,241	2,987	2,171	4,639	7,265	2,869	3,481
LATIN AMERICA	3,524	2,131	2,036	502	1,376	4,519	5,386
CACM	---	---	18	---	---	---	163
LAFTA	3,493	2,131	2,018	502	1,376	4,519	5,223
ARGENTINA	3,229	1,771	1,260	478	1,376	4,519	4,157
OTHER LATIN AMERICA	31	---	---	---	---	---	---
AFRICA	16,985	13,444	15,894	22,309	35,798	34,964	33,661
TUNISIA	26	47	287	3,860	5,448	247	109
SUDAN	424	107	919	1,564	2,239	921	68
GAMBIA	---	---	762	1,997	2,883	5,654	6,450
NIGERIA	12,563	12,847	12,306	13,912	21,919	26,116	22,489
MOZAMBIQUE	414	38	695	827	3,213	1,962	3,836
ASIA	2,756	2,494	1,369	2,943	8,320	9,017	2,848
CHINA MAINLAND	271	154	---	---	3,782	8,790	2,540
ISRAEL	1,024	549	935	1,454	1,419	54	181
OCEANIA	21	5	---	---	---	---	---
OTHER	6	3	10	7	2	5	10

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 422- OTHER FIXED VEGETABLE OILS							
WORLD	88,545	78,458	76,011	81,351	85,713	80,982	73,760
NORTH AMERICA	4,125	2,357	2,026	2,836	2,387	2,791	2,957
UNITED STATES	2,202	1,576	1,328	777	897	1,546	1,792
CANADA	1,923	781	698	2,059	1,490	1,245	1,165
EUROPE	12,572	16,769	12,270	13,354	12,272	11,320	13,195
EEC	9,848	13,867	10,155	10,430	10,319	9,760	11,230
GERMANY	1,679	1,689	2,707	2,694	2,681	2,683	2,997
NETHERLANDS	7,939	12,033	7,141	7,457	7,096	6,541	7,392
EFTA	1,718	1,955	1,918	1,768	1,386	906	1,029
DENMARK	433	725	1,114	1,361	1,035	542	494
EASTERN EUROPE	796	838	36	910	417	233	729
OTHER EUROPE	210	109	161	246	150	421	207
LATIN AMERICA	11,699	15,417	13,570	10,402	13,414	5,592	5,201
CACM	---	---	---	69	312	---	447
LAFTA	11,699	15,417	13,570	10,333	13,102	5,590	4,754
ARGENTINA	8,747	12,353	11,660	6,903	7,094	3,707	3,318
BRAZIL	2,006	2,128	1,342	3,387	5,965	1,859	1,434
OTHER LATIN AMERICA	---	---	---	---	---	2	---
AFRICA	34,347	21,432	18,885	19,072	21,593	29,334	15,970
NIGERIA	28,686	17,835	15,887	16,046	17,273	26,049	10,822
ANGOLA	3,646	2,445	2,301	2,792	2,770	2,475	2,774
ASIA	20,443	14,793	18,713	24,457	24,401	22,649	27,692
CHINA MAINLAND	1,966	1,711	2,330	2,675	3,050	1,926	2,509
INDIA	4,201	2,996	1,888	2,586	120	40	483
CEYLON	2,349	934	3,083	4,782	3,714	952	1,578
MALAYSIA INC. SINGAP	11,806	8,924	10,659	11,921	14,603	---	---
MALAYSIA	---	---	---	---	---	12,330	14,518
SINGAPORE	---	---	---	---	---	3,602	5,781
PHILIPPINES	15	---	361	2,012	2,668	3,469	2,172
OCEANIA	5,351	7,688	10,541	11,229	11,639	9,289	8,721
AUSTRALIA	3,594	4,818	5,967	4,864	7,853	5,789	5,352
BRIT. AOC OCEANIA	1,751	2,870	4,574	6,362	3,786	3,500	3,369
OTHER	8	2	6	1	7	7	24

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 431- OILS AND FATS, PROCESSED							
WORLD	19,720	18,785	20,705	25,428	28,794	31,206	33,088
NORTH AMERICA	767	823	962	1,391	1,352	2,034	2,446
UNITED STATES	738	810	750	1,215	1,352	1,991	2,107
EUROPE	14,976	14,803	15,936	20,677	24,710	26,138	27,890
EEC	10,365	9,803	8,094	9,037	10,496	10,692	12,615
BELGIUM-LUXEMBOURG	1,075	924	1,116	1,195	1,539	1,400	898
GERMANY	3,653	3,875	3,820	4,955	5,544	5,618	6,909
NETHERLANDS	5,455	4,846	2,947	2,692	3,191	3,508	4,585
EFTA	3,926	4,345	7,125	10,176	13,188	14,535	14,123
DENMARK	565	682	723	792	816	677	965
NORWAY	1,214	1,163	3,067	4,842	8,522	9,984	8,440
SWEDEN	1,002	1,421	2,313	3,449	2,713	2,612	3,375
SWITZERLAND	363	266	235	261	340	331	353
UNITED KINGDOM	759	798	778	806	785	924	826
EASTERN EUROPE	26	68	91	123	55	101	72
OTHER EUROPE	659	587	626	1,341	971	810	1,080
IRELAND	486	333	262	524	124	171	278
FINLAND	141	226	322	774	820	623	736
LATIN AMERICA	2,529	1,966	1,722	1,756	1,463	1,534	1,146
CACM	---	---	---	---	---	---	7
LAFTA	2,511	1,927	1,690	1,739	1,438	1,522	1,122
BRAZIL	2,239	1,630	1,398	1,472	1,233	1,267	865
OTHER LATIN AMERICA	18	39	32	17	25	12	17
AFRICA	921	641	1,174	742	765	674	795
ASIA	117	109	548	413	142	206	218
OCEANIA	407	443	352	440	353	606	589
AUSTRALIA	353	375	267	378	319	523	440
OTHER	3	---	11	9	9	14	4

TABLE 3--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 5511 ESSENTIAL OILS, ETC.							
WORLD	27,954	26,268	29,254	31,117	32,831	32,499	31,169
NORTH AMERICA	3,816	3,707	3,645	4,444	4,817	5,774	5,228
UNITED STATES	3,813	3,706	3,636	4,419	4,802	5,756	5,121
EUROPE	13,868	12,557	14,516	16,470	17,943	17,839	17,110
EEC	11,596	10,211	11,835	13,618	14,694	14,716	14,209
FRANCE	6,448	5,285	5,908	6,861	8,285	7,634	7,355
GERMANY	768	801	449	504	611	666	645
ITALY	3,686	3,402	4,704	5,559	4,971	5,452	5,384
NETHERLANDS	642	685	689	606	691	780	749
EFTA	807	1,055	797	903	1,084	1,380	997
SWITZERLAND	232	417	353	326	456	796	512
UNITED KINGDOM	477	555	360	446	434	432	358
EASTERN EUROPE	437	417	505	696	948	814	996
BULGARIA	231	194	212	294	531	284	505
OTHER EUROPE	1,028	874	1,379	1,253	1,217	929	908
SPAIN	949	783	1,269	1,035	1,105	827	701
LATIN AMERICA	2,899	2,746	3,589	2,827	2,684	2,779	3,109
CACM	282	434	1,369	1,094	558	551	612
GUATEMALA	282	434	1,369	1,094	541	551	612
LAFTA	1,779	1,696	1,441	982	993	1,179	1,359
BRAZIL	1,359	1,291	1,052	597	559	710	869
OTHER LATIN AMERICA	838	616	779	751	1,133	1,049	1,138
JAMAICA	---	---	436	333	549	559	474
BR. TERR. AM. NES	604	519	138	118	229	339	202
AFRICA	1,754	1,331	1,809	1,567	1,471	1,730	1,638
REUNION	522	214	464	315	447	329	423
ASIA	5,528	5,819	5,624	5,709	5,857	4,332	4,036
CHINA MAINLAND	899	1,021	1,116	1,520	1,851	2,104	1,695
INDIA	2,690	2,993	1,858	1,801	2,001	921	993
CEYLON	333	264	558	595	219	171	112
CHINA FORMOSA	618	792	1,311	917	529	107	58
LEBANON	300	307	184	268	484	451	505
OCEANIA	86	104	73	91	55	44	49
OTHER	3	4	-2	9	4	1	-1
OTHER AFRICA	721	689	429	604	521	589	780

IMPORTS OF AGRICULTURAL COMMODITIES, VALUE BY ORIGIN, 1961-

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 5995 STARCHES, ETC.							
WORLD	59,502	58,740	49,748	56,476	61,285	61,963	61,538
NORTH AMERICA	7,227	6,482	5,625	6,740	6,813	6,959	7,088
UNITED STATES	6,786	5,742	4,975	5,757	5,490	5,723	6,021
CANADA	441	740	650	983	1,323	1,236	1,067
EUROPE	41,807	42,741	32,954	39,838	42,956	43,962	44,017
EEC	30,107	31,350	24,529	29,184	30,481	29,472	30,711
BELGIUM-LUXEMBOURG	1,995	1,991	1,530	1,726	1,836	2,225	2,422
FRANCE	5,773	5,796	3,672	5,470	4,821	5,545	3,865
GERMANY	11,919	12,483	7,468	7,171	7,152	7,273	8,320
NETHERLANDS	9,522	10,200	11,582	14,427	16,251	14,175	15,614
EFTA	5,545	5,814	4,142	4,819	5,138	5,198	5,776
DENMARK	930	912	1,133	1,038	1,297	763	1,034
SWEDEN	692	744	640	876	1,033	1,288	1,397
UNITED KINGDOM	2,326	2,699	1,510	1,898	1,949	2,319	2,352
EASTERN EUROPE	5,670	5,195	4,061	5,436	6,910	8,998	7,210
GERMANY EAST	145	111	479	767	871	2,448	1,342
POLAND	3,614	3,301	2,347	3,807	5,198	5,410	4,327
CZECHOSLOVAKIA	1,079	1,054	641	366	375	743	949
OTHER EUROPE	485	382	222	399	427	294	320
LATIN AMERICA	1,771	1,498	1,963	1,048	2,057	1,026	1,533
CACM	---	---	---	---	---	---	---
LAFTA	1,620	1,299	1,848	905	1,957	883	1,433
ARGENTINA	1,271	935	1,839	876	1,643	356	1,177
OTHER LATIN AMERICA	151	199	115	143	100	143	100
AFRICA	721	689	429	604	521	589	780
ASIA	2,661	2,635	3,795	1,842	1,393	2,352	2,668
MALAYSIA INC. SINGAP	2,367	2,366	3,112	1,546	949	---	---
OCEANIA	5,312	4,692	4,984	6,396	7,538	7,076	5,455
AUSTRALIA	1,665	1,328	1,840	2,321	2,073	2,623	2,882
NEW ZEALAND	3,647	3,364	3,144	4,075	5,464	4,453	2,573
OTHER	3	3	-2	8	7	-1	-3

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-1967

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
TOTAL AGRICULTURE							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 001- LIVE ANIMALS							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 011- MEAT (F, C, F)							
WORLD	892,561	940,937	945,522	1,008,253	975,191	904,387	946,080
NORTH AMERICA	34,156	32,538	27,903	42,093	42,399	40,364	36,648
UNITED STATES	30,665	28,648	22,549	33,141	31,184	30,620	26,220
EUROPE	189,208	215,532	171,525	194,946	214,572	204,927	302,990
EEC	24,379	27,794	28,244	26,233	21,416	19,681	24,552
NETHERLANDS	16,682	14,803	15,596	13,778	12,116	9,035	15,080
EFTA	53,984	61,726	54,031	76,981	81,956	78,475	93,412
DENMARK	40,523	41,443	43,345	62,885	65,666	62,526	77,404
EASTERN EUROPE	53,298	67,698	38,194	42,817	43,052	36,888	40,515
YUGOSLAVIA	25,193	47,195	21,500	22,466	12,082	11,063	5,205
OTHER EUROPE	57,547	58,314	51,056	48,915	68,148	69,883	144,511
IRELAND	53,740	53,952	46,943	44,708	63,567	67,297	132,129
LATIN AMERICA	237,073	257,825	350,951	252,579	175,329	189,629	180,400
CACM	---	---	---	---	---	---	---
LAFTA	236,339	257,819	350,935	252,578	175,329	189,629	180,400
ARGENTINA	206,778	235,174	301,357	210,214	159,254	171,691	162,896
URUGUAY	21,620	18,142	43,583	36,634	7,840	11,806	10,750
OTHER LATIN AMERICA	734	6	16	1	---	---	---
AFRICA	18,446	20,462	20,802	18,069	23,227	29,193	23,209
UNION S. AFRICA	10,463	11,497	11,237	9,736	14,670	23,919	13,295
ASIA	8,736	11,794	2,114	18,409	22,624	13,255	14,302
JAPAN	8,150	10,260	1	16,894	20,355	9,540	9,277
OCEANIA	404,935	402,785	372,217	482,157	497,038	427,014	388,536
AUSTRALIA	80,022	79,782	63,407	134,680	144,726	108,870	48,130
NEW ZEALAND	324,913	323,003	308,810	347,477	352,312	318,144	340,406
OTHER	7	1	10	---	2	5	-5

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0111 MEAT OF BOVINE ANIMALS (F, C, F)							
WORLD	342,397	371,643	396,775	404,351	349,753	334,127	341,104
NORTH AMERICA	721	762	480	2,441	2,893	1,524	1,253
EUROPE	92,327	94,745	62,086	63,144	70,039	71,561	152,094
EEC	9,630	13,490	11,849	9,416	8,701	4,565	6,164
NETHERLANDS	5,012	4,602	5,431	4,904	5,406	2,236	3,521
EFTA	19,675	12,776	9,999	8,640	7,523	10,351	19,540
DENMARK	18,532	8,966	4,935	7,856	5,586	8,324	16,283
EASTERN EUROPE	28,850	46,103	21,084	23,244	23,543	14,547	15,353
YUGOSLAVIA	17,655	41,439	17,425	16,517	8,576	8,498	3,340
OTHER EUROPE	34,172	22,376	19,154	21,844	30,272	42,098	111,037
IRELAND	34,171	22,357	19,042	21,750	30,223	42,091	110,298
LATIN AMERICA	187,740	215,631	294,862	208,235	128,015	143,633	136,172
CACM	---	---	---	---	---	---	---
LAFTA	187,740	215,631	294,846	208,235	128,015	143,633	136,172
ARGENTINA	163,847	195,169	248,503	168,382	118,475	129,516	122,633
BRAZIL	3,183	2,836	3,610	3,846	4,819	3,617	3,838
URUGUAY	20,710	17,626	42,726	36,000	4,706	10,498	9,203
OTHER LATIN AMERICA	---	---	16	---	---	---	---
AFRICA	16,621	17,336	18,600	15,712	20,686	26,102	21,234
UNION S. AFRICA	9,180	8,905	9,607	7,983	12,753	21,098	11,574
SO. RHODESIA	6,781	8,071	7,858	6,513	7,473	2,980	7,240
ASIA	---	---	---	---	---	25	4
OCEANIA	44,983	43,171	20,742	114,821	128,114	91,280	30,347
AUSTRALIA	32,721	35,519	18,569	87,876	97,152	71,564	20,840
NEW ZEALAND	12,262	7,652	2,173	26,945	30,962	19,716	9,507
OTHER	5	-2	5	-2	6	2	---

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0113 MEAT OF SWINE (F, C, F)							
WORLD	21,537	24,637	35,044	40,811	43,123	39,083	46,120
NORTH AMERICA	2,954	1,951	3,032	2,114	24	496	371
EUROPE	2,950	1,948	1,717	885	491	914	5,412
EEC	9,504	8,354	17,555	25,499	21,203	25,043	23,993
NETHERLANDS	5,290	2,798	14,998	23,593	18,418	20,863	20,904
EFTA	3,217	4,860	1,776	1,778	2,428	3,243	2,711
DENMARK	6,211	4,755	4,193	5,309	3,626	4,922	5,611
SWEDEN	212	343	1,244	260	150	353	565
EASTERN EUROPE	487	1,094	1,197	622	553	2,014	965
POLAND	33	7	19	965	863	2	400
HUNGARY	5,474	3,300	1,678	3,397	2,036	1,367	1,127
ROMANIA	2,868	8,546	9,005	6,417	16,841	6,405	9,748
YUGOSLAVIA	2,868	8,546	8,895	6,226	16,704	5,949	2,331
OTHER EUROPE	---	---	110	191	137	452	6,925
IRELAND	596	13	617	161	5	26	327
FINLAND	---	---	---	---	---	---	---
LATIN AMERICA	596	13	617	161	5	26	327
CACM	---	---	---	---	---	---	---
LAFTA	121	290	69	39	58	1,071	539
OTHER LATIN AMERICA	1	---	1	4	27	99	23
AFRICA	805	727	446	381	850	105	97
ASIA	581	687	446	381	813	105	97
OCEANIA		---	-1	2	-2	2	-1
NEW ZEALAND							
OTHER							

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0114 POULTRY (F, C, F)							
WORLD		13,897	35,508	43,648	45,669	43,222	45,218
NORTH AMERICA	658	1,351	7,115	5,621	2,815	2,967	1,790
UNITED STATES	656	1,351	7,095	5,605	2,787	2,947	1,790
EUROPE	12,086	12,472	28,375	38,026	42,853	40,256	43,428
EEC	2,515	2,267	11,129	14,064	10,151	12,650	9,820
FRANCE	7	35	3,934	6,234	4,865	5,894	4,112
GERMANY	503	528	462	239	113	1,019	558
NETHERLANDS	2,005	1,704	6,594	7,276	4,837	5,312	4,964
EFTA	3,146	4,317	10,185	16,293	23,543	17,953	22,111
DENMARK	3,087	4,263	10,130	16,227	23,491	17,917	22,100
EASTERN EUROPE	3,730	3,781	5,829	6,818	8,688	9,290	10,996
POLAND	391	364	600	496	1,883	2,560	2,475
CZECHOSLOVAKIA	532	504	1,138	1,070	446	594	496
HUNGARY	2,250	2,573	3,944	4,924	5,927	5,528	6,420
BULGARIA	359	196	22	196	47	149	1,326
OTHER EUROPE	2,695	2,107	1,232	851	471	363	501
IRELAND	2,695	2,107	1,232	851	471	363	501
LATIN AMERICA	188	74	13	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	188	74	13	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	1	---	---	---	---	---	---
OTHER		---	5	1	1	-1	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 012- MEAT DRIED, SALTED, ETC.							
WORLD	404,210	408,836	394,605	400,418	407,570	407,023	411,853
NORTH AMERICA	637	897	839	756	489	570	312
EUROPE	401,466	406,240	393,309	399,247	406,359	404,119	409,593
EEC	17,211	16,478	9,218	9,701	6,958	5,184	9,027
NETHERLANDS	16,790	16,031	8,803	9,275	6,427	4,627	8,360
EFTA	295,435	304,836	301,503	305,523	317,250	315,011	318,177
DENMARK	285,499	294,749	292,511	296,203	306,365	304,127	306,780
SWEDEN	9,883	10,048	8,942	9,265	10,831	10,850	11,392
EASTERN EUROPE	59,803	57,931	55,812	55,329	54,812	55,344	58,310
POLAND	48,526	51,000	51,499	51,228	51,746	52,923	55,100
OTHER EUROPE	29,017	26,995	26,776	28,694	27,339	28,580	24,079
IRELAND	28,697	26,675	26,364	28,286	26,813	28,192	23,778
LATIN AMERICA	312	164	397	149	132	57	16
CACM	---	---	2	1	3	2	2
LAFTA	306	160	389	146	124	39	11
OTHER LATIN AMERICA	6	4	6	2	5	16	3
AFRICA	1,065	755	47	228	492	2,246	1,911
ASIA	---	1	1	19	4	30	21
OCEANIA	725	780	7	17	94	---	---
OTHER	5	-1	5	2	---	1	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 013- MEAT CANNED, ETC.							
WORLD	220,156	210,035	193,805	201,374	185,921	191,951	216,847
NORTH AMERICA	2,556	2,705	2,842	4,108	3,574	2,977	3,078
UNITED STATES	2,266	2,221	2,413	2,880	2,827	2,507	2,517
EUROPE	133,668	123,773	119,587	129,749	127,914	129,328	136,040
EEC	47,708	42,106	41,445	48,645	48,417	49,530	51,565
GERMANY	4,210	2,888	2,674	2,887	2,393	2,543	2,168
ITALY	3,142	3,531	3,763	3,652	3,934	3,708	3,104
NETHERLANDS	38,615	34,108	33,681	40,489	38,500	40,462	42,155
EFTA	39,549	40,519	40,488	40,189	41,484	44,704	45,604
DENMARK	37,205	38,703	38,830	38,964	40,105	42,912	43,892
EASTERN EUROPE	34,242	32,246	29,678	32,936	30,160	25,692	28,128
POLAND	12,833	13,189	14,456	15,189	13,900	12,777	12,812
YUGOSLAVIA	18,643	16,366	12,207	15,152	13,494	9,752	12,154
OTHER EUROPE	12,169	8,902	7,976	7,979	7,853	9,402	10,743
IRELAND	10,635	7,678	7,425	7,210	7,247	8,771	9,270
LATIN AMERICA	41,688	42,813	40,047	30,650	18,648	22,371	43,671
CACM	---	---	---	---	---	---	---
LAFTA	41,231	42,779	40,046	30,650	18,648	22,369	43,671
ARGENTINA	28,566	29,407	30,377	21,299	10,962	16,125	35,895
PARAGUAY	6,124	7,101	5,654	6,550	4,857	4,195	5,470
OTHER LATIN AMERICA	457	34	1	---	---	2	---
AFRICA	16,838	19,851	19,289	20,052	17,999	21,648	16,561
UNION S. AFRICA	3,832	4,229	5,265	7,215	5,950	10,538	6,964
KENYA	---	---	4,368	3,061	3,234	3,997	4,781
TANZANIA	---	---	4,718	5,816	5,546	6,836	4,717
SO. RHODESIA	3,279	4,375	4,902	3,927	3,229	235	43
ASIA	130	199	169	904	2,820	2,450	2,320
OCEANIA	25,269	20,696	11,874	15,902	14,962	13,170	15,166
AUSTRALIA	23,181	18,401	10,431	13,785	13,505	10,836	12,571
NEW ZEALAND	2,088	2,295	1,443	2,117	1,457	2,334	2,595
OTHER	7	-2	-3	9	4	7	11

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 022- MILK AND CREAM							
WORLD	113,764	115,712	136,477	186,109	161,104	129,604	152,970
NORTH AMERICA	971	1,890	14,076	41,050	8,478	489	129
UNITED STATES	17	843	11,406	39,952	6,981	337	34
EUROPE	79,521	82,183	83,332	100,296	100,593	101,798	115,597
EEC	48,220	49,025	44,351	48,629	44,859	47,153	52,240
BELGIUM-LUXEMBOURG	4,047	2,398	2,232	1,021	3,258	1,858	3,699
FRANCE	22,200	24,878	22,021	25,132	24,981	22,550	28,376
GERMANY	611	133	61	4,621	5,337	10,423	4,433
NETHERLANDS	21,351	21,602	20,015	17,822	11,247	12,290	15,682
EFTA	19,381	23,022	28,888	31,430	29,219	33,042	35,059
AUSTRIA	3,142	4,534	8,570	10,439	12,922	14,098	16,742
DENMARK	12,974	14,082	15,210	17,566	13,317	11,169	10,115
SWEDEN	646	639	4,417	3,280	29	922	1,082
UNITED KINGDOM	2,551	3,718	281	84	2,777	6,783	6,498
EASTERN EUROPE	16	16	51	54	21	13	2,830
OTHER EUROPE	11,904	10,120	10,042	20,183	26,494	21,590	25,468
IRELAND	10,674	8,270	9,601	16,018	23,036	18,243	21,905
FINLAND	1,153	1,445	410	3,721	3,164	2,353	2,877
LATIN AMERICA	---	---	1	1	---	5	46
CACM	---	---	---	---	---	---	---
LAFTA	---	---	1	1	---	5	46
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	217	570	498	503	321	647	495
ASIA	14	110	---	19	102	52	137
OCEANIA	33,044	30,957	38,572	44,234	51,609	26,609	36,571
AUSTRALIA	1,762	2,468	4,292	3,888	3,902	3,045	3,131
NEW ZEALAND	31,282	28,489	34,280	40,346	47,707	23,564	33,440
OTHER	-3	2	-2	6	1	4	-5

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 023- BUTTER							
WORLD	437,372	418,470	426,654	484,282	456,999	469,164	489,799
NORTH AMERICA	1	---	3,735	25,522	2,546	312	304
EUROPE	192,955	173,757	175,731	193,086	210,284	215,121	237,233
EEC	33,918	19,085	23,449	25,214	31,422	29,122	51,340
FRANCE	16,422	1,840	6,344	9,382	9,997	5,901	8,547
NETHERLANDS	16,534	16,265	15,358	15,719	20,951	21,177	24,973
EFTA	106,710	112,364	104,152	107,822	117,547	115,210	106,825
DENMARK	98,846	99,375	93,188	95,728	105,473	103,319	97,493
SWEDEN	3,255	8,772	6,471	4,881	5,596	6,518	4,668
EASTERN EUROPE	23,050	19,243	17,131	21,135	25,576	29,671	35,101
POLAND	20,391	16,978	13,434	15,965	17,667	17,872	22,496
OTHER EUROPE	29,277	23,065	30,999	38,915	35,739	41,118	43,967
IRELAND	15,205	13,498	16,210	16,957	19,191	22,941	27,745
FINLAND	14,071	9,566	14,789	21,454	16,543	18,177	15,730
LATIN AMERICA	12,122	8,233	12,063	9,561	4,847	4,727	5,389
CACM	---	---	---	---	---	---	---
LAFTA	12,120	8,233	12,063	9,561	4,847	4,727	5,389
ARGENTINA	11,409	8,233	11,088	8,450	4,085	4,443	5,389
OTHER LATIN AMERICA	2	---	---	---	---	---	---
AFRICA	13,545	4,423	1,861	785	454	742	451
ASIA	---	8	199	---	562	556	329
OCEANIA	218,746	232,050	233,062	255,328	238,308	247,705	246,088
AUSTRALIA	60,026	73,374	72,506	76,056	66,208	80,121	62,689
NEW ZEALAND	158,720	158,676	160,556	179,272	172,100	167,584	183,399
OTHER	3	-1	3	---	-2	1	5

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 024- CHEESE AND CURD							
WORLD	157,098	162,434	162,877	175,541	178,888	170,469	188,217
NORTH AMERICA	8,253	12,055	11,196	14,088	13,979	14,225	13,317
CANADA	7,829	11,681	10,993	13,957	13,864	14,065	12,880
EUROPE	49,160	52,014	60,359	65,068	69,537	79,391	90,060
EEC	22,178	24,306	27,899	28,085	33,381	39,201	45,015
FRANCE	3,087	3,703	4,462	6,508	11,677	12,584	18,072
ITALY	5,784	6,320	6,245	5,127	4,916	4,797	4,862
NETHERLANDS	12,270	13,173	15,729	14,617	15,193	20,048	19,760
EFTA	21,412	21,077	23,406	23,887	23,842	23,261	24,109
DENMARK	15,897	15,786	17,103	16,650	16,597	15,760	15,965
NORWAY	3,305	3,035	3,931	4,306	3,881	4,223	4,731
SWITZERLAND	1,611	1,643	1,615	1,844	1,855	2,007	2,145
EASTERN EUROPE	405	440	527	961	908	1,452	2,275
OTHER EUROPE	5,165	6,191	8,527	12,135	11,406	15,477	18,661
IRELAND	2,574	3,828	6,367	9,342	9,022	12,623	16,400
FINLAND	2,589	2,362	2,160	2,791	2,035	2,843	2,207
LATIN AMERICA	23	36	66	218	237	382	307
CACM	---	---	---	---	---	---	---
LAFTA	23	36	66	217	237	382	307
OTHER LATIN AMERICA	---	---	---	1	---	---	---
AFRICA	3,430	2,288	2	81	8	18	202
ASIA	128	137	173	297	235	218	244
OCEANIA	96,100	95,903	91,082	95,788	94,890	76,237	84,081
AUSTRALIA	15,117	15,459	15,923	14,782	12,346	6,688	8,076
NEW ZEALAND	80,983	80,444	75,159	81,006	82,544	69,549	76,005
OTHER	4	1	-1	1	2	-2	6

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 025- EGGS							
WORLD	87,516	77,958	75,627	66,881	76,026	76,092	79,585
NORTH AMERICA	107	112	238	520	1,477	544	29
EUROPE	60,990	58,170	62,234	54,764	59,736	63,057	63,506
EEC	9,911	16,777	23,807	10,920	10,296	8,931	4,524
BELGIUM-LUXEMBOURG	3,267	5,883	8,291	4,716	2,956	1,595	700
FRANCE	414	354	337	1,189	1,377	1,403	1,322
NETHERLANDS	5,878	10,277	14,937	4,789	5,778	5,644	2,418
EFTA	14,282	10,641	11,890	10,569	10,270	12,858	14,598
DENMARK	11,682	8,140	7,814	5,405	4,589	6,094	8,097
SWEDEN	1,565	1,900	3,568	4,638	3,189	2,430	2,113
UNITED KINGDOM	2	1	133	298	2,178	3,617	3,599
EASTERN EUROPE	33,960	28,509	22,547	28,874	36,596	36,885	37,413
POLAND	25,596	20,955	15,678	16,006	20,923	17,486	15,440
CZECHOSLOVAKIA	806	505	1,019	1,859	2,455	2,974	2,241
HUNGARY	2,535	1,508	2,160	5,221	5,324	4,869	8,174
ROMANIA	1,773	2,875	2,270	3,856	4,131	4,987	4,381
BULGARIA	3,169	2,571	1,369	1,854	3,626	6,009	6,849
OTHER EUROPE	2,837	2,243	3,990	4,401	2,574	4,383	6,971
FINLAND	1,647	1,775	3,224	4,046	2,466	4,284	6,613
LATIN AMERICA	895	426	713	303	924	667	6
CACM	---	---	---	---	---	---	---
LAFTA	895	426	713	303	743	667	6
OTHER LATIN AMERICA	---	---	---	---	181	---	---
AFRICA	5,260	5,463	4,354	5,240	3,779	4,299	3,387
UNION S. AFRICA	5,260	5,463	4,354	5,219	3,777	4,299	3,387
ASIA	5,883	3,463	2,247	2,837	2,267	4,149	8,211
CHINA MAINLAND	1,487	1,397	1,276	368	908	3,506	4,258
ISRAEL	4,360	2,065	968	2,465	1,351	623	3,945
OCEANIA	14,381	10,327	5,841	3,220	7,840	3,377	4,442
AUSTRALIA	14,253	10,327	4,676	3,215	7,383	3,212	4,147
OTHER	---	-3	---	-3	3	-1	4

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 041- WHEAT, UNMILLED							
WORLD	5,158,270	5,242,006	5,118,721	5,056,000	5,656,517	5,518,590	5,015,601
NORTH AMERICA	3,266,615	3,084,776	2,904,150	3,155,000	2,877,897	3,040,533	2,498,223
UNITED STATES	773,170	776,852	509,717	833,000	556,853	1,073,539	662,229
CANADA	2,493,445	2,307,924	2,394,433	2,322,000	2,321,044	1,966,994	1,835,994
EUROPE	980,604	998,902	1,279,028	1,001,000	1,392,353	1,654,434	1,725,156
EEC	299,951	401,854	676,408	962,000	1,266,615	1,295,096	1,008,621
BELGIUM-LUXEMBOURG	47,125	33,838	135,120	75,000	104,226	177,422	54,599
FRANCE	150,687	315,430	459,574	678,000	659,284	492,999	322,545
NETHERLANDS	24,930	33,713	79,149	190,000	434,636	515,159	555,934
EFTA	46,374	49,277	98,415	39,000	125,298	136,554	138,749
SWEDEN	43,023	14,351	88,423	38,000	118,471	118,778	112,778
EASTERN EUROPE	511,103	518,017	442,280	---	---	101,152	395,223
USSR	461,269	456,482	428,640	---	---	---	73,378
OTHER EUROPE	123,176	29,754	61,925	---	440	121,632	182,563
LATIN AMERICA	229,137	517,312	265,052	228,000	689,076	258,067	281,114
CACM	---	---	---	---	---	---	---
LAFTA	228,675	517,020	265,052	228,000	689,076	258,067	280,714
ARGENTINA	228,675	517,020	265,052	228,000	687,540	258,055	280,714
OTHER LATIN AMERICA	462	292	---	---	---	---	400
AFRICA	---	3,314	16,527	2,000	249	---	3
ASIA	403	5,735	151	2,000	---	1	1
OCEANIA	681,514	631,969	653,813	670,000	696,942	565,554	511,104
AUSTRALIA	681,514	631,969	653,813	670,000	696,942	565,554	511,104
OTHER	-3	-2	---	-2,000	---	1	---

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY SOURCE, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 042- RICE							
WORLD	207,553	212,519	223,909	194,344	229,614	242,231	218,371
NORTH AMERICA	38,072	50,754	64,161	69,763	70,402	77,583	76,711
UNITED STATES	38,041	50,754	64,161	69,763	70,373	77,583	76,711
EUROPE	95,058	94,658	77,898	50,891	51,106	43,935	75,883
EEC	92,904	93,216	75,509	46,928	49,502	40,843	61,559
GERMANY	1,189	3,583	1,759	1,427	4,272	3,483	7,012
ITALY	82,466	77,710	66,658	38,165	31,319	27,400	43,733
NETHERLANDS	7,213	9,986	6,000	6,422	9,636	8,977	8,720
EASTERN EUROPE	327	96	---	486	40	41	62
OTHER EUROPE	1,643	1,209	2,328	3,204	1,416	2,853	13,785
SPAIN	1,578	861	1,470	2,874	567	756	9,718
LATIN AMERICA	12,532	19,887	15,228	8,151	31,128	42,233	12,860
CACM	---	---	---	---	---	---	---
LAFTA	10,460	16,914	14,472	7,203	28,829	40,961	12,093
ARGENTINA	2,351	8,782	9,477	4,363	11,455	14,104	3,701
BRAZIL	4,540	64	30	20	14,606	15,020	6,360
URUGUAY	3,317	7,907	4,965	2,619	2,758	11,528	2,032
OTHER LATIN AMERICA	2,072	2,973	756	948	2,299	1,272	767
AFRICA	22,602	3,583	16,306	18,738	14,626	17,300	6,489
EGYPT	21,494	1,685	11,159	17,774	13,552	12,453	2,271
ASIA	31,303	35,036	44,606	38,737	57,356	54,024	36,887
CHINA MAINLAND	2,119	1,573	1	1,479	16,407	19,999	21,397
PAKISTAN	793	1,178	1,444	3,108	3,481	6,199	3,680
BURMA	5,440	8,070	3,675	2,079	3,815	8,132	661
THAILAND	21,562	24,194	26,484	31,592	32,930	18,803	10,004
OCEANIA	7,987	8,606	5,711	8,063	5,004	7,155	9,538
AUSTRALIA	7,987	8,606	5,711	8,063	5,004	7,155	9,538
OTHER	-1	-5	-1	1	-8	1	3

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-1967

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 043- BARLEY, UNMILLED							
WORLD	1,617,124	1,269,815	1,063,085	1,357,904	1,262,324	1,160,865	1,282,853
NORTH AMERICA	241,612	420,313	303,159	381,990	451,727	348,110	414,754
UNITED STATES	122,461	236,961	140,252	187,984	196,008	216,610	123,347
CANADA	119,151	183,352	162,907	194,006	255,719	131,500	291,407
EUROPE	1,060,782	405,794	617,197	800,456	745,287	788,288	831,173
EEC	414,382	196,310	392,229	687,841	455,788	402,150	513,677
FRANCE	386,687	183,862	378,355	664,746	441,865	386,980	502,439
EFTA	87,754	76,654	79,684	72,117	86,943	280,590	206,782
DENMARK	21,790	17,996	24,832	36,712	44,468	29,660	12,502
SWEDEN	55,309	22,894	27,236	19,707	29,645	16,479	40,456
UNITED KINGDOM	10,392	30,194	27,600	15,673	12,229	234,451	153,824
EASTERN EUROPE	553,252	111,756	72,689	39,782	202,352	105,282	108,967
USSR	530,436	71,436	33,464	---	96,110	1	14,955
POLAND	7,697	3,329	4,229	14,201	24,690	42,547	17,687
YUGOSLAVIA	1,908	25,464	2,255	11,729	19,768	57,813	70,848
OTHER EUROPE	5,394	21,074	72,595	716	204	266	1,747
LATIN AMERICA	4,268	39,144	150	3,053	3,686	595	---
CACM	---	---	---	---	---	---	---
LAFTA	4,268	37,500	150	3,053	3,686	595	---
OTHER LATIN AMERICA	---	1,644	---	---	---	---	---
AFRICA	---	---	2,641	410	---	---	6
ASIA	707	237,645	67,009	47,826	32,983	---	1
SYRIA	---	95,261	54,467	47,826	30,503	---	---
IRAQ	---	140,485	4,186	---	2,480	---	---
OCEANIA	309,757	166,918	72,929	124,166	28,640	23,870	36,920
AUSTRALIA	309,757	166,918	72,929	124,166	28,640	23,870	36,920
OTHER	-2	1	---	3	1	2	-1

TABLE 5 CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
				METRIC TON			
SITC 044- MAIZE (CORN), UNMILLED							
WORLD	3,940,809	5,579,529	4,340,692	4,398,000	4,291,358	4,491,678	4,711,744
NORTH AMERICA	2,405,439	3,949,481	2,590,832	2,779,000	2,578,732	3,041,123	2,131,718
UNITED STATES	2,323,143	3,713,125	2,318,954	2,470,000	2,371,557	2,926,834	2,123,776
CANADA	82,296	236,356	271,878	309,000	207,175	114,289	7,942
EUROPE	1,043,998	870,085	788,828	745,000	1,105,116	912,457	1,449,618
EEC	470,782	391,825	333,778	446,000	838,939	705,328	1,111,001
BELGIUM-LUXEMBOURG	45,892	60,517	66,003	42,000	84,467	75,370	77,186
FRANCE	277,456	73,153	73,770	125,000	28,300	163,628	483,859
NETHERLANDS	145,015	255,914	183,032	219,000	367,456	430,320	549,293
EASTERN EUROPE	567,109	476,658	455,020	299,000	265,768	200,087	338,473
ROMANIA	275,249	288,537	370,792	276,000	242,796	71,537	171,487
YUGOSLAVIA	120,386	29,587	36,444	6,000	20,262	127,588	166,347
OTHER EUROPE	5,209	7	19	---	339	86	83
LATIN AMERICA	133,968	180,942	125,711	136,000	279,509	435,248	404,883
CACM	---	---	---	---	---	---	---
LAFTA	133,703	180,942	125,467	136,000	279,509	435,248	404,883
ARGENTINA	128,015	180,942	100,703	134,000	93,565	163,634	288,235
MEXICO	---	---	---	---	180,899	252,099	110,936
OTHER LATIN AMERICA	265	---	244	---	---	---	---
AFRICA	356,676	576,770	835,264	735,000	327,981	102,835	724,990
UNION S. AFRICA	209,778	336,726	673,548	647,000	200,910	28,394	547,256
ANGOLA	102,188	77,820	74,723	75,000	124,126	48,406	85,801
ASIA	727	2,250	51	---	1	---	4
OCEANIA	1	1	3	---	19	8	520
OTHER	---	---	3	3,000	---	7	11

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 045- CEREALS, UNMILLED, NES							
WORLD	1,064,010	1,652,363	989,270	895,224	1,190,329	1,332,600	1,072,594
NORTH AMERICA	321,944	757,246	453,451	356,125	503,241	696,014	361,403
UNITED STATES	313,933	707,630	320,961	249,390	426,257	597,520	276,790
CANADA	8,011	49,616	132,490	106,735	76,984	98,494	84,613
EUROPE	242,353	233,032	207,520	150,631	304,087	345,305	306,717
EEC	66,554	107,268	71,620	97,190	206,395	209,851	164,411
BELGIUM-LUXEMBOURG	10,424	29,962	7,290	4,564	30,475	37,432	18,420
NETHERLANDS	31,676	72,999	44,631	66,749	150,233	162,543	121,268
EFTA	34,470	39,198	41,520	15,026	44,285	52,819	32,817
SWEDEN	26,740	26,493	20,029	9,940	36,231	48,092	25,601
EASTERN EUROPE	129,172	67,576	91,938	29,725	30,639	66,101	107,683
USSR	101,806	55,939	63,523	2,067	386	23,519	56,690
ROMANIA	4,758	3,232	1,138	16,814	20,885	27,653	13,719
OTHER EUROPE	12,157	18,990	2,442	8,690	22,768	16,534	1,806
LATIN AMERICA	302,569	449,213	243,316	283,568	189,685	156,665	192,821
CACM	---	---	---	---	---	---	1
LAFTA	302,425	449,213	243,316	283,278	189,685	156,665	192,817
ARGENTINA	302,221	449,198	242,705	282,749	189,630	155,201	182,669
OTHER LATIN AMERICA	144	---	---	290	---	---	3
AFRICA	128,750	103,272	20,346	72,278	149,010	70,388	125,066
UNION S. AFRICA	77,898	87,722	10,114	61,872	136,534	59,235	115,055
ASIA	317	137	29	26	605	291	481
OCEANIA	68,080	109,467	64,613	32,595	43,705	63,927	86,107
AUSTRALIA	68,080	109,467	64,613	32,595	43,704	63,927	86,107
OTHER	-3	-4	-5	1	-4	10	-1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0451 RYE, UNMILLED							
WORLD	223,274	128,434	181,387	152,791	147,362	222,221	193,050
NORTH AMERICA	43,420	52,867	89,643	90,403	45,782	133,113	93,929
UNITED STATES	37,964	38,313	56,877	67,246	30,473	71,280	39,981
CANADA	5,456	14,554	32,766	23,157	15,309	61,833	53,948
EUROPE	145,326	72,606	91,269	32,373	53,148	78,962	98,900
EEC	18,624	144	559	1,352	4,144	77	2,731
GERMANY	18,576	133	444	238	4,078	67	58
EFTA	1,809	16,460	5,808	1,176	1,066	3,816	1,707
SWEDEN	1,006	11,035	83	1,148	1,034	3,732	1,684
EASTERN EUROPE	117,283	55,953	84,902	24,287	26,112	60,380	94,462
USSR	97,531	54,242	63,523	2,067	---	23,519	56,690
GERMANY EAST	18,055	17	20,412	3,536	3,790	1	---
POLAND	---	---	---	83	---	11,158	21,164
ROMANIA	1,545	---	---	15,073	18,337	25,656	11,008
OTHER EUROPE	7,610	49	---	5,558	21,826	14,689	---
TURKEY	---	---	---	5,558	21,826	14,689	---
LATIN AMERICA	33,728	2,383	477	30,015	48,433	10,146	222
CACM	---	---	---	---	---	---	---
LAFTA	33,728	2,383	477	29,725	48,433	10,146	222
ARGENTINA	33,728	2,383	477	29,725	48,433	10,146	222
OTHER LATIN AMERICA	---	---	---	290	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	799	578	---	---	---	---	---
OTHER	1	---	-2	---	-1	---	-1

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0452 OATS, UNMILLED							
WORLD	242,348	314,146	260,134	256,230	302,263	288,708	267,375
NORTH AMERICA	66,234	114,575	136,677	90,380	117,445	133,694	52,100
UNITED STATES	63,679	79,914	37,127	6,849	55,952	97,235	21,435
CANADA	2,555	34,661	99,550	83,531	61,493	36,459	30,665
EUROPE	40,894	46,480	54,026	54,726	61,125	83,244	91,108
EEC	3,395	4,353	17,854	40,284	17,697	33,785	58,281
FRANCE	1,376	569	16,220	23,401	829	247	14,058
GERMANY	1,220	944	1,494	272	16,316	6,613	681
NETHERLANDS	795	2,839	140	16,611	552	26,855	43,541
EFTA	32,472	22,518	35,318	13,565	42,935	48,480	30,784
DENMARK	4,547	5,047	9,448	4,773	7,738	4,120	4,935
SWEDEN	25,733	15,457	19,946	8,792	35,197	44,360	23,917
EASTERN EUROPE	4,578	2,792	---	---	407	932	1,615
OTHER EUROPE	449	16,817	854	877	86	47	428
LATIN AMERICA	84,569	109,840	15,467	84,535	84,538	21,711	51,358
CACM	---	---	---	---	---	---	---
LAFTA	84,569	109,840	15,467	84,535	84,538	21,711	51,358
ARGENTINA	84,568	109,840	15,467	84,535	84,498	20,341	51,201
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	10	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	50,651	43,254	53,967	26,578	39,156	50,054	72,809
AUSTRALIA	50,651	43,254	53,967	26,578	39,156	50,054	72,809
OTHER	---	-3	-3	1	-1	5	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 046- MEAL AND FLOUR OF WHEAT							
WORLD	467,135	472,989	357,806	313,380	279,081	244,990	128,894
NORTH AMERICA	310,588	296,200	245,975	226,135	205,252	173,608	72,989
UNITED STATES	64,873	50,334	11,398	11,167	13,025	12,005	7,968
CANADA	245,715	245,866	234,577	214,968	192,227	161,603	65,021
EUROPE	101,797	117,857	65,961	46,314	39,403	44,045	42,092
EEC	86,426	92,070	40,861	36,596	36,779	42,007	40,388
FRANCE	9,753	19,586	17,196	10,348	6,106	5,329	3,414
GERMANY	56,954	62,292	21,684	21,440	29,735	34,661	35,544
EASTERN EUROPE	439	120	---	---	---	---	---
OTHER EUROPE	14,827	25,317	24,107	8,912	1,650	1,748	1,307
FINLAND	13,567	22,746	21,685	6,489	---	---	---
LATIN AMERICA	799	959	2	21	---	---	1
CACM	---	---	---	---	---	---	---
LAFTA	799	959	2	21	---	---	1
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	333	32	8	3	1	25	33
ASIA	39	154	31	7	13	21	11
OCEANIA	53,576	57,784	45,825	40,898	34,411	27,285	13,766
AUSTRALIA	53,576	57,784	45,824	40,897	34,411	27,284	13,756
OTHER	3	3	4	2	1	6	2

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 051- FRUIT AND NUTS, FRESH, DRIED							
WORLD	2,283,715	2,428,859	2,280,028	2,521,008	2,640,241	2,741,301	2,693,079
NORTH AMERICA	96,956	100,385	90,385	103,172	114,882	122,641	115,808
UNITED STATES	74,294	77,296	65,244	72,733	84,152	96,148	92,999
CANADA	22,662	23,089	25,141	30,439	30,730	26,493	22,809
EUROPE	942,893	986,540	851,033	1,047,828	1,050,420	1,080,749	1,023,050
EEC	491,726	454,212	444,551	484,296	548,685	542,936	568,817
FRANCE	34,069	23,967	31,117	34,890	69,362	59,923	110,107
ITALY	427,816	412,334	394,408	430,375	464,326	465,543	436,657
EASTERN EUROPE	25,296	50,491	44,251	45,589	61,509	42,838	48,697
OTHER EUROPE	413,758	466,381	346,952	507,246	430,826	485,308	394,277
SPAIN	380,853	422,247	305,994	464,778	377,256	433,797	332,379
LATIN AMERICA	508,381	528,472	571,319	585,102	686,437	689,362	708,370
CACM	25,747	46,051	56,443	64,803	54,001	83,588	66,267
GUATEMALA	15,301	36,468	38,345	40,601	21,672	18,285	11,357
HONDURAS	9,123	9,510	18,098	24,202	29,426	63,043	53,986
LAFTA	193,655	159,403	190,558	177,774	231,855	223,540	283,887
ARGENTINA	40,809	36,871	54,909	37,894	52,205	39,378	45,607
BRAZIL	65,034	50,696	60,402	49,165	60,036	38,770	40,847
COLOMBIA	32,544	16,689	25,436	11,406	33,270	55,296	80,333
ECUADOR	48,805	49,880	42,802	68,910	76,446	77,893	110,669
OTHER LATIN AMERICA	288,979	323,018	324,318	342,525	400,581	382,234	358,216
JAMAICA	---	---	157,634	164,565	188,880	197,813	186,318
BR. TERR. AM. NES	256,733	277,144	129,454	144,948	174,831	166,484	164,418
AFRICA	357,071	379,893	330,456	327,303	301,459	343,687	343,581
UNION S. AFRICA	209,949	250,631	221,002	245,955	230,779	272,593	267,998
MOROCCO	34,197	28,078	24,359	35,497	30,246	42,960	49,704
CAMEROUN	86,143	76,958	64,934	22,679	8,801	5,820	12
ASIA	253,593	275,872	308,231	308,041	338,352	341,187	375,604
CYPRUS	48,592	49,456	39,705	44,398	56,168	41,160	52,195
ISRAEL	177,807	192,901	235,368	228,905	245,709	265,025	288,497
OCEANIA	124,822	157,716	128,587	149,577	148,674	163,637	126,677
AUSTRALIA	100,134	123,945	112,671	119,398	122,363	126,434	96,333
NEW ZEALAND	24,688	33,770	15,855	30,009	26,293	37,194	30,344
OTHER	-1	-19	17	-15	17	38	-11

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0511 ORANGES, ETC.							
WORLD	722,870	764,092	696,242	816,744	794,455	821,501	791,967
NORTH AMERICA	4,876	4,584	5,203	4,481	9,272	13,636	18,105
UNITED STATES	4,833	4,584	5,203	4,481	9,272	13,636	18,105
EUROPE	356,004	383,415	291,415	418,893	365,251	395,011	314,866
EEC	112,899	92,460	102,182	99,043	116,222	83,537	80,166
ITALY	106,592	90,328	96,318	96,897	113,156	81,017	78,428
EASTERN EUROPE	1	3	---	6	124	---	23
OTHER EUROPE	243,085	290,815	189,132	319,700	248,891	311,078	234,676
GREECE	2,137	5,398	11,668	9,334	18,078	15,052	16,963
SPAIN	238,092	283,081	174,092	307,772	226,832	291,763	211,574
LATIN AMERICA	43,141	33,721	48,123	32,092	45,795	24,705	30,254
CACM	---	4	---	---	4	---	---
LAFTA	42,924	33,310	46,418	31,894	45,577	24,179	29,582
BRAZIL	41,590	33,193	44,730	31,365	44,643	23,926	29,379
OTHER LATIN AMERICA	217	407	1,705	198	214	526	672
AFRICA	141,072	154,065	128,372	150,330	142,556	154,804	166,231
UNION S. AFRICA	108,615	125,459	101,579	112,071	105,843	108,270	114,795
MOROCCO	29,616	25,522	22,227	32,375	27,539	39,751	45,773
ASIA	177,676	187,637	222,740	210,243	229,819	232,153	262,321
CYPRUS	30,193	25,786	20,934	23,968	24,278	15,249	22,108
ISRAEL	147,417	160,679	201,314	186,221	205,313	216,893	240,082
OCEANIA	107	672	383	708	1,757	1,187	186
OTHER	-6	-2	6	-3	5	5	4

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0512 OTHER CITRUS FRUIT							
WORLD		170,485	156,733	187,073	183,529	190,093	196,518
NORTH AMERICA	30,321	21,036	20,189	18,463	16,995	16,246	18,378
UNITED STATES	30,268	21,029	20,187	18,463	16,995	16,233	18,371
EUROPE	54,618	64,459	51,575	68,908	66,172	68,583	67,043
EEC	50,981	58,017	46,492	63,547	61,421	63,411	60,390
ITALY	48,748	56,766	45,189	62,596	60,410	62,681	59,165
EASTERN EUROPE	---	---	---	---	2	13	---
OTHER EUROPE	3,628	6,212	4,970	5,255	4,737	5,145	6,653
SPAIN	2,493	4,423	1,504	3,553	3,293	3,699	4,214
LATIN AMERICA	11,668	14,765	13,346	11,310	8,349	9,003	7,837
CACM	16	182	275	1,168	454	623	478
LAFTA	1,849	1,665	3,341	2,643	1,515	823	879
OTHER LATIN AMERICA	9,803	12,918	9,730	7,499	6,380	7,557	6,480
JAMAICA	---	---	3,320	2,053	2,775	1,804	2,319
BR. TERR. AM. NES	9,697	12,540	1,910	2,414	1,244	1,432	1,967
TRINIDAD TOBAGO	---	---	4,470	3,017	2,350	4,296	2,149
AFRICA	24,623	28,417	27,332	34,925	31,399	33,045	36,523
UNION S. AFRICA	19,532	22,991	23,343	29,522	27,101	27,223	29,699
MOROCCO	3,013	2,188	1,644	2,181	1,481	2,373	2,439
MOZAMBIQUE	1,525	2,099	1,330	2,198	1,980	2,283	4,125
ASIA	36,506	41,772	44,166	53,432	60,551	63,194	66,450
CYPRUS	9,740	11,449	11,501	12,975	21,692	16,780	20,316
ISRAEL	26,741	29,970	31,993	40,336	38,692	46,063	46,107
OCEANIA	3	39	128	33	53	16	288
OTHER		-3	-3	2	10	6	-1

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0514 APPLES, FRESH							
WORLD		369,810	336,950	360,866	432,980	455,998	437,924
NORTH AMERICA	45,932	57,838	49,299	64,253	66,105	70,953	55,485
UNITED STATES	23,964	35,606	24,687	35,723	36,055	45,010	33,925
CANADA	21,968	22,232	24,612	28,530	30,050	25,943	21,560
EUROPE	114,496	104,559	83,108	90,206	143,346	138,224	161,353
EEC	104,829	92,310	70,731	81,652	125,470	129,210	150,351
FRANCE	18,111	1,617	4,315	12,460	27,445	29,569	69,384
ITALY	84,030	87,349	64,255	67,660	95,474	96,396	73,650
EFTA	5,773	7,271	7,510	3,468	1,864	2,425	4,865
EASTERN EUROPE	2,335	2,096	3,863	4,302	14,686	6,097	4,914
HUNGARY	1,959	1,252	3,462	3,156	12,084	5,702	4,053
OTHER EUROPE	1,559	2,882	1,004	784	1,326	492	1,223
LATIN AMERICA	36,586	30,565	46,438	29,597	43,220	36,799	39,600
CACM	---	---	28	---	---	---	---
LAFTA	36,586	30,565	46,410	29,597	43,220	36,799	39,600
ARGENTINA	35,137	29,614	45,192	26,615	40,461	31,800	37,443
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	38,001	49,473	45,962	54,502	53,818	76,776	71,483
UNION S. AFRICA	38,001	49,464	45,962	54,502	53,818	76,763	71,420
ASIA	196	674	631	125	1,031	492	1,494
OCEANIA	100,556	126,704	111,511	122,189	125,460	132,747	108,509
AUSTRALIA	78,489	95,883	97,431	95,212	101,787	98,898	80,161
NEW ZEALAND	22,067	30,820	14,080	26,897	23,673	33,849	28,348
OTHER		-3	1	-6	---	7	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0515 GRAPES, FRESH							
WORLD		227,894	141,579	162,740	181,821	185,012	174,298
NORTH AMERICA	3,931	3,637	2,992	2,390	2,355	6,144	5,411
UNITED STATES	3,931	3,637	2,992	2,390	2,355	6,144	5,411
EUROPE	177,273	191,322	112,822	132,864	151,565	148,710	136,904
EEC	106,241	109,453	41,309	57,149	59,612	70,771	68,782
FRANCE	9,545	17,057	6,081	9,692	14,228	16,119	14,276
ITALY	93,128	88,390	33,241	45,650	43,901	53,036	52,676
EASTERN EUROPE	13,894	29,512	26,040	18,609	28,091	18,235	17,234
HUNGARY	4,573	5,893	4,196	3,765	1,610	4,906	3,925
BULGARIA	6,552	13,960	15,089	8,434	19,654	8,999	7,238
YUGOSLAVIA	2,389	8,718	5,296	5,365	4,079	2,596	2,605
OTHER EUROPE	56,640	51,862	45,287	56,710	63,597	59,636	50,838
GREECE	8,507	10,395	3,709	4,561	4,485	3,205	3,865
SPAIN	44,317	35,881	38,564	49,503	54,364	52,216	42,432
TURKEY	3,458	5,412	2,892	2,473	4,663	4,106	4,396
LATIN AMERICA	1,615	1,239	1,988	2,886	2,835	2,423	1,865
CACM	---	---	1	---	---	---	---
LAFTA	1,602	1,228	1,987	2,886	2,835	2,423	1,865
ARGENTINA	886	886	1,712	2,598	2,663	2,206	1,567
OTHER LATIN AMERICA	13	11	---	---	---	---	---
AFRICA	17,141	25,026	19,201	19,975	17,382	20,135	22,152
UNION S. AFRICA	16,110	24,181	19,194	19,970	17,376	20,131	22,149
ASIA	4,883	6,673	4,575	4,600	7,669	7,591	7,958
CYPRUS	3,929	5,939	4,343	4,038	7,342	6,915	7,532
OCEANIA	6	1	---	30	15	8	14
OTHER		-4	1	-5	---	1	-6

EUROPEAN ...

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 052- DRIED FRUIT							
WORLD	181,599	221,647	202,199	189,960	195,404	189,858	182,473
NORTH AMERICA	36,189	41,757	32,052	33,345	38,705	37,020	39,004
UNITED STATES	36,088	41,719	32,043	33,274	38,697	37,009	38,991
EUROPE	94,881	117,543	122,860	101,214	106,621	101,002	90,062
EEC	6,656	8,764	6,693	8,657	6,859	8,688	6,261
FRANCE	4,275	4,675	3,669	4,553	3,722	5,259	3,772
EASTERN EUROPE	2,706	4,959	4,270	4,353	3,796	4,714	5,891
OTHER EUROPE	85,115	103,263	111,009	87,857	95,256	86,692	77,513
GREECE	49,258	62,643	68,292	51,934	57,319	51,138	48,283
SPAIN	3,307	4,034	3,736	3,601	3,145	3,282	2,663
TURKEY	32,388	36,576	38,838	32,261	34,749	32,250	26,563
LATIN AMERICA	1,901	1,679	1,729	2,365	1,250	842	698
CACM	---	---	---	---	---	---	---
LAFTA	1,901	1,679	1,726	2,361	1,239	833	692
OTHER LATIN AMERICA	---	---	3	4	11	9	6
AFRICA	3,774	4,424	3,490	4,834	5,259	7,059	5,719
UNION S. AFRICA	2,598	3,429	2,751	3,732	4,093	5,702	4,543
ASIA	11,002	15,156	18,682	11,271	10,315	15,699	19,767
IRAQ	4,141	5,527	11,202	2,946	3,972	6,518	6,065
IRAN	6,419	9,007	7,112	7,694	5,649	7,779	12,549
OCEANIA	33,851	41,086	23,392	36,932	33,251	28,243	27,218
AUSTRALIA	33,851	41,086	23,392	36,932	33,251	28,243	27,218
OTHER	1	2	-6	-1	3	-7	5

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 053- FRUITS, PRES. AND PREPS.							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ...

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 054- VEGETABLES, FRESH, FROZEN							
WORLD	1,387,023	1,843,258	1,918,333	1,649,573	1,627,332	1,658,760	1,615,707
NORTH AMERICA	84,923	132,807	270,319	130,939	165,232	163,206	159,048
UNITED STATES	71,303	92,883	200,105	85,631	102,788	114,421	97,579
CANADA	13,620	39,924	70,214	45,308	62,444	48,785	61,469
EUROPE	1,062,182	1,329,952	1,279,826	1,199,041	1,158,935	1,172,389	1,115,797
EEC	531,296	678,957	648,765	433,736	530,306	502,749	543,070
BELGIUM-LUXEMBOURG	63,018	62,598	62,064	18,825	28,224	20,617	18,230
FRANCE	60,624	66,036	42,032	56,185	60,594	59,308	62,896
GERMANY	18,288	20,690	23,555	9,975	12,512	13,227	19,801
ITALY	150,787	218,163	170,930	138,490	180,732	173,686	186,778
NETHERLANDS	238,579	311,470	350,184	210,261	248,244	235,911	255,365
EFTA	60,372	139,296	151,511	270,253	92,962	144,853	50,495
DENMARK	34,364	102,782	124,401	244,660	68,533	80,167	23,926
UNITED KINGDOM	15,446	8,101	8,944	14,362	11,724	47,482	11,733
EASTERN EUROPE	58,738	93,970	83,751	80,383	135,735	132,463	114,133
POLAND	20,056	33,449	36,679	32,792	69,886	63,893	38,851
HUNGARY	14,288	21,652	24,187	18,759	26,803	29,327	30,305
OTHER EUROPE	411,776	417,729	395,799	414,669	399,932	392,324	408,099
IRELAND	18,254	25,867	35,437	25,717	20,312	26,474	22,337
SPAIN	366,465	350,795	338,511	364,833	363,725	350,497	352,080
LATIN AMERICA	25,480	18,325	30,876	20,435	31,451	18,880	22,402
CACM	---	13	---	1	2	---	---
LAFTA	25,342	17,932	29,995	19,339	29,702	15,800	18,429
CHILE	24,604	16,991	27,828	18,663	28,804	14,473	14,485
OTHER LATIN AMERICA	138	380	881	1,095	1,747	3,080	3,973
AFRICA	107,906	180,132	142,644	113,347	113,962	124,461	101,706
EGYPT	54,763	98,969	80,732	60,392	49,060	68,802	49,709
ASIA	96,104	171,422	180,085	168,930	145,628	170,377	201,147
CYPRUS	85,641	137,368	152,763	153,719	121,032	139,188	183,723
OCEANIA	10,435	10,616	14,591	16,888	12,133	9,464	15,590
OTHER	-7	4	-8	-7	-9	-17	17

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0555 VEGETABLES, PRES. OR PREP. NES							
WORLD		162,498	212,325	201,241	202,753	229,769	248,792
NORTH AMERICA	5,300	11,006	22,768	15,927	16,536	16,934	14,036
UNITED STATES	4,378	8,052	13,988	10,393	9,168	9,049	6,102
CANADA	922	2,954	8,780	5,534	7,368	7,885	7,934
EUROPE	127,237	143,547	172,952	169,497	171,387	192,358	212,956
EEC	103,451	104,738	112,968	98,060	90,347	92,443	107,788
BELGIUM-LUXEMBOURG	1,776	2,350	2,949	2,714	2,830	3,171	3,877
FRANCE	1,346	2,755	2,885	3,031	5,481	6,632	6,001
ITALY	96,497	95,752	102,000	87,332	77,154	77,046	91,474
NETHERLANDS	3,402	3,397	4,522	4,199	4,152	4,333	5,423
EFTA	7,559	11,342	21,235	26,644	40,585	50,105	51,071
PORTUGAL	6,517	8,584	18,310	24,135	38,053	45,136	43,963
EASTERN EUROPE	12,100	23,163	27,396	26,404	25,865	30,860	34,389
POLAND	809	2,004	2,088	2,183	2,875	2,942	4,389
HUNGARY	2,959	4,041	4,940	4,980	3,793	4,828	7,961
BULGARIA	6,915	14,809	17,012	15,951	15,685	20,495	18,658
OTHER EUROPE	4,117	4,304	11,353	18,389	14,590	18,950	19,708
SPAIN	3,590	3,760	10,515	16,994	13,215	17,303	17,637
LATIN AMERICA	152	237	585	1,587	1,143	812	1,122
CACM	---	---	---	---	---	1	---
LAFTA	1	3	117	1,138	908	532	843
OTHER LATIN AMERICA	151	234	468	449	235	279	279
AFRICA	3,802	5,030	9,966	8,894	7,465	8,247	8,222
UNION S. AFRICA	3,321	4,465	8,983	8,472	7,097	7,589	7,655
ASIA	1,154	2,474	4,755	4,387	5,400	10,887	11,959
CHINA FORMOSA	11	27	928	1,688	1,891	4,939	6,013
OCEANIA	433	210	1,288	947	824	525	504
OTHER		-6	11	2	-2	6	-7

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0611 RAW SUGAR							
WORLD	2,487,247	2,527,583	2,642,396	2,458,381	2,303,332	2,445,721	2,389,033
NORTH AMERICA	764	576	1,581	---	---	---	628
EUROPE	401,108	380,203	174,325	118,235	74,154	77,871	112,446
EEC	202,593	123,403	56,651	29,264	24,776	13,093	37,181
FRANCE	122,043	115,950	20,367	22,220	24,636	12,188	6,631
EASTERN EUROPE	164,394	203,894	113,487	76,297	48,863	64,758	74,900
POLAND	106,202	131,804	41,436	58,037	43,067	38,628	61,348
OTHER EUROPE	16	7	1	10,355	---	---	---
LATIN AMERICA	964,780	879,718	1,068,192	965,022	938,364	950,678	825,489
CACM	317	460	1,569	9,580	---	---	---
LAFTA	41,725	18,022	43,103	131,650	65,946	227,599	31,083
BRAZIL	24,763	15,588	23,887	30,266	64,640	182,866	18,112
OTHER LATIN AMERICA	922,738	861,236	1,023,520	823,792	872,418	723,079	794,406
CUBA	108,638	180,438	205,351	102,142	141,484	122,374	117,643
DOMINICAN REP.	231,699	8,893	25,303	69,467	12,764	---	16,276
JAMAICA	---	---	270,742	244,334	261,739	214,587	202,285
BR. TERR. AM. NES	581,943	671,905	237,514	176,966	192,580	191,470	167,132
TRINIDAD TOBAGO	---	---	143,476	132,531	142,241	124,977	147,843
BRIT. GUIANA	---	---	139,708	97,928	121,610	60,049	143,227
AFRICA	685,025	724,355	787,625	699,652	635,116	761,893	772,969
UNION S. AFRICA	206,816	188,329	189,549	136,528	107,933	148,407	250,027
MOZAMBIQUE	87,763	91,361	104,186	93,052	59,113	93,073	106,921
BR. AOC AFR. NES	---	409,550	453,507	430,324	412,926	446,561	376,078
ASIA	71	49	40,410	61,811	75,311	98,505	78,135
INDIA	3	4	29,941	10,435	75,309	98,504	78,135
OCEANIA	435,505	542,678	570,261	613,663	580,389	556,766	599,365
AUSTRALIA	338,027	444,626	422,887	467,574	409,483	422,346	452,649
BRIT. AOC OCEANIA	97,478	98,052	147,374	146,089	170,906	134,420	146,716
OTHER	-6	4	2	-2	-2	8	1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 071- COFFEE							
WORLD	267,969	289,305	316,652	319,134	306,245	341,589	344,753
NORTH AMERICA	1,860	2,302	2,747	2,663	2,144	1,988	1,532
EUROPE	1,946	2,732	3,187	3,489	5,497	12,080	12,546
EEC	1,611	2,075	2,370	2,543	3,687	7,998	11,579
EASTERN EUROPE	---	---	---	---	999	2,942	---
OTHER EUROPE	---	20	187	230	163	128	85
LATIN AMERICA	179,305	192,287	207,510	204,619	189,966	208,562	211,008
CACM	16,457	17,600	17,724	18,503	19,158	22,802	24,136
GUATEMALA	5,941	6,301	5,980	5,636	5,379	7,814	5,926
EL SALVADOR	3,311	3,948	3,448	4,077	3,346	2,634	3,496
COSTA RICA	5,803	6,336	7,306	7,083	7,477	9,843	10,844
LAFTA	158,599	169,345	184,222	180,260	166,142	181,400	182,820
BRAZIL	131,251	140,562	154,177	142,701	131,490	145,488	147,728
COLOMBIA	22,872	23,582	25,392	33,387	29,802	28,956	29,331
OTHER LATIN AMERICA	4,249	5,342	5,564	5,856	4,666	4,360	4,052
HAITI	3,108	3,945	3,595	3,459	3,479	2,988	2,510
AFRICA	69,485	79,126	87,123	84,132	87,809	95,555	97,131
ANGOLA	15,561	18,658	19,757	22,704	20,851	18,887	19,979
ETHIOPIA	3,154	3,823	3,831	2,879	3,375	2,796	2,851
UGANDA	---	---	22,176	11,851	34,110	35,161	42,809
KENYA	---	---	27,490	20,243	12,522	13,607	16,678
TANZANIA	---	---	5,035	3,865	4,759	7,730	6,271
BR. AOC AFR. NES	189	43,973	68	6	14	---	---
ASIA	15,355	12,763	16,004	23,819	20,068	22,195	20,425
INDONESIA	8,268	9,015	11,231	13,903	14,948	17,074	14,030
OCEANIA	23	95	81	408	759	1,208	2,113
OTHER	-5	---	---	4	2	1	-2

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 072- COCOA							
WORLD	186,898	202,742	195,574	166,683	184,820	207,621	183,046
NORTH AMERICA	287	119	374	309	391	299	151
EUROPE	34,895	31,363	30,981	32,708	33,560	35,546	32,254
EEC	32,928	30,306	29,599	30,781	32,257	34,634	30,729
ITALY	6,477	5,027	4,362	3,163	4,692	4,420	3,529
NETHERLANDS	23,107	22,894	22,803	24,241	23,305	25,999	25,815
EASTERN EUROPE	---	---	31	428	54	80	115
OTHER EUROPE	761	17	316	175	101	4	134
LATIN AMERICA	17,405	15,883	11,883	10,379	14,052	18,606	16,710
CACM	39	36	42	54	9	21	34
LAFTA	14,546	12,948	9,050	8,377	11,865	15,683	13,090
BRAZIL	10,569	9,244	5,674	5,081	8,699	12,280	8,759
OTHER LATIN AMERICA	2,820	2,899	2,791	1,948	2,178	2,902	3,586
AFRICA	131,057	151,280	148,743	119,811	131,192	145,000	127,155
GHANA	76,535	90,211	83,765	63,043	71,228	74,211	69,636
NIGERIA	45,829	53,766	56,998	52,885	51,195	64,762	53,797
ANGOLA	1,972	1,987	2,266	2,786	3,194	2,996	2,832
ASIA	476	540	455	976	2,311	4,149	1,620
OCEANIA	2,776	3,552	3,138	2,492	3,312	4,018	5,152
AUSTRALIA	1,292	1,660	2,040	1,646	2,212	3,272	4,009
OTHER	2	5	---	8	2	3	4

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN 1961-

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 073- CHOCOLATE AND PREPS.							
WORLD	46,386	51,230	49,503	51,977	53,870	66,772	74,207
NORTH AMERICA	108	77	92	107	115	227	292
EUROPE	46,220	50,957	49,073	51,378	52,958	65,772	73,213
EEC	4,736	4,984	4,909	5,531	5,945	6,788	8,458
GERMANY	1,762	1,907	1,778	2,076	2,284	2,615	2,608
ITALY	667	897	849	881	873	1,085	2,045
NETHERLANDS	1,712	1,617	1,553	1,803	1,991	2,311	2,924
EFTA	3,571	4,904	5,305	5,940	7,183	10,047	12,728
DENMARK	298	453	793	919	1,233	1,400	1,870
SWEDEN	454	1,113	1,004	1,039	1,001	1,387	1,654
SWITZERLAND	1,672	1,756	1,680	1,871	2,562	3,386	4,139
UNITED KINGDOM	895	1,319	1,250	1,605	1,655	2,797	3,684
EASTERN EUROPE	442	508	387	437	899	1,411	2,154
OTHER EUROPE	37,471	40,561	38,472	39,470	38,931	47,526	49,873
IRELAND	37,442	40,485	38,416	39,243	38,051	45,828	47,460
FINLAND	28	75	56	226	880	1,697	2,413
LATIN AMERICA	---	132	96	193	475	248	45
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	2	---
OTHER LATIN AMERICA	---	132	96	193	475	246	45
AFRICA	27	3	2	2	---	40	31
ASIA	27	58	218	289	311	465	611
OCEANIA	2	2	20	5	9	14	13
OTHER	2	1	2	3	2	6	2

IMPORTS OF AGRICULTURAL COMMODITIES BY COUNTRY

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 074- TEA AND MATE							
WORLD	256,958	258,157	260,184	249,522	259,808	239,298	254,014
NORTH AMERICA	24	8	50	7	22	12	30
EUROPE	5,919	2,359	3,409	5,971	8,536	5,770	8,743
EEC	5,183	1,550	2,677	5,061	7,561	4,816	7,581
NETHERLANDS	4,658	1,094	2,182	4,204	6,843	4,393	6,738
EASTERN EUROPE	9	27	20	56	6	24	28
OTHER EUROPE	4	17	5	25	10	38	288
LATIN AMERICA	2,521	2,097	2,849	2,919	4,598	3,768	2,469
CACM	---	---	---	---	---	---	---
LAFTA	2,515	2,096	2,849	2,919	4,598	3,768	2,469
ARGENTINA	2,247	1,898	2,638	2,623	4,255	3,421	2,095
OTHER LATIN AMERICA	6	1	---	---	---	---	---
AFRICA	28,901	34,322	31,358	31,737	32,587	45,791	43,586
KENYA	---	---	9,616	12,181	11,812	18,469	13,414
TANZANIA	---	---	3,097	3,110	3,544	4,921	4,378
MOZAMBIQUE	6,294	7,056	5,523	5,126	6,107	8,565	10,966
MALAWI	---	---	---	2	6,035	8,545	8,558
SO. RHODESIA	10,641	10,362	8,474	7,998	164	---	---
BR. AOC AFR. NES	---	15,429	997	725	982	1,114	1,164
ASIA	219,594	219,371	222,504	208,871	214,056	183,953	199,180
INDIA	128,516	123,205	129,004	121,562	115,445	98,993	110,967
CEYLON	75,178	82,309	81,677	78,929	83,114	73,655	82,039
INDONESIA	5,856	3,787	5,072	2,947	4,360	2,649	2,651
OCEANIA	---	---	6	14	4	---	---
OTHER	-1	---	8	3	5	4	6

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 075- SPICES							
WORLD	17,986	18,031	19,010	18,278	19,110	18,623	20,066
NORTH AMERICA	131	197	244	191	234	251	403
UNITED STATES	117	176	206	170	211	196	284
EUROPE	5,109	4,883	4,515	4,897	5,609	5,933	6,074
EEC	2,147	1,868	1,491	1,947	1,838	2,420	1,929
FRANCE	316	319	313	292	244	274	238
GERMANY	289	316	213	348	322	326	353
ITALY	286	264	225	380	475	543	420
NETHERLANDS	1,256	954	723	920	782	1,057	778
EASTERN EUROPE	2,339	2,237	2,267	2,155	3,013	2,670	3,178
POLAND	233	94	205	191	326	330	404
HUNGARY	804	851	819	773	786	814	895
ROMANIA	359	351	429	390	658	606	601
BULGARIA	477	409	572	438	678	579	892
YUGOSLAVIA	382	433	152	283	505	274	172
OTHER EUROPE	500	641	624	635	637	703	747
SPAIN	385	524	512	506	493	511	560
LATIN AMERICA	1,532	1,380	1,640	1,603	1,641	1,808	1,992
CACM	50	47	132	134	178	182	152
LAFTA	606	507	414	389	438	552	719
BRAZIL	562	475	368	384	402	526	690
OTHER LATIN AMERICA	876	826	1,094	1,080	1,025	1,074	1,121
JAMAICA	---	---	682	689	646	835	827
BR. TERR. AM. NES	876	824	341	289	351	204	254
AFRICA	2,463	3,174	3,824	3,925	4,288	3,624	3,507
MOROCCO	503	1,054	774	975	915	562	671
SIERRA LEONE	246	123	367	588	175	126	1,070
NIGERIA	458	560	1,308	903	1,775	1,447	274
BR. AOC AFR. NES	3	1,222	651	524	562	653	662
ASIA	8,703	8,365	8,751	7,605	7,294	6,961	8,033
CHINA MAINLAND	355	377	320	520	977	1,034	861
INDIA	2,365	2,427	1,534	1,070	967	875	1,084
MALAYSIA INC. SINGAP	4,240	3,941	5,342	3,226	3,057	---	---
MALAYSIA	---	---	---	---	---	2,209	1,989
INDONESIA	1,106	1,038	873	2,193	1,409	1,562	2,073
SINGAPORE	---	---	---	---	---	708	1,145
OCEANIA	41	39	40	49	43	38	51
OTHER	7	-7	-4	8	1	8	6

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 081- ANIMAL FEEDS							
WORLD	3,313,399	3,706,484	3,722,144	4,033,542	4,031,559	4,031,209	3,920,404
NORTH AMERICA	299,312	487,186	502,262	506,038	666,814	614,728	487,754
UNITED STATES	126,635	206,763	221,956	200,887	282,242	272,153	197,137
CANADA	172,677	280,423	280,306	305,151	384,572	342,575	290,617
EUROPE	1,135,103	1,060,420	1,276,876	1,266,125	1,283,972	1,606,239	1,752,118
EEC	346,174	366,732	587,891	596,389	555,996	696,433	678,971
FRANCE	74,939	72,492	128,756	131,625	114,271	129,496	101,297
GERMANY	189,723	188,114	345,867	366,753	345,657	433,393	407,567
ITALY	30,021	62,292	56,093	35,669	45,473	79,512	90,084
NETHERLANDS	44,067	40,653	47,669	51,279	41,127	48,207	71,627
EFTA	214,992	234,544	314,400	366,651	389,243	370,676	495,556
DENMARK	105,313	142,369	176,268	195,636	203,338	182,094	206,478
NORWAY	90,941	45,214	62,502	106,733	130,898	119,535	207,768
EASTERN EUROPE	371,250	217,563	105,377	31,996	37,604	191,660	180,410
USSR	357,739	200,294	96,018	20,354	22,416	152,549	135,831
OTHER EUROPE	202,687	241,581	269,208	271,089	301,129	347,470	397,181
ICELAND	41,638	41,109	55,882	73,351	73,246	103,502	88,552
IRELAND	42,924	52,192	60,652	50,839	45,674	47,263	66,745
TURKEY	112,215	144,842	149,108	144,164	176,540	190,712	229,627
LATIN AMERICA	564,965	698,687	541,604	735,563	616,580	562,223	505,716
CACM	19,880	29,539	32,515	32,856	47,784	50,704	74,076
LAFTA	499,392	630,287	485,318	669,643	549,389	480,690	398,875
ARGENTINA	296,678	393,626	249,768	425,888	289,312	315,453	255,028
PERU	118,910	148,725	131,791	139,056	134,165	69,848	60,807
OTHER LATIN AMERICA	45,693	38,861	23,771	33,064	19,407	30,829	32,765
AFRICA	506,055	527,833	522,292	663,784	670,396	618,014	664,030
UNION S. AFRICA	96,712	176,610	134,333	166,734	159,959	134,293	182,190
SENEGAL	39,193	34,176	47,913	53,007	63,764	49,217	38,118
NIGERIA	80,214	98,173	109,762	169,186	192,121	185,347	179,938
ASIA	790,017	902,957	865,941	839,960	785,412	626,963	500,503
INDIA	427,618	490,882	472,654	409,310	458,009	371,232	278,576
BURMA	205,185	220,696	216,364	199,994	122,281	53,954	45,113
SYRIA	31,378	44,973	45,044	68,551	54,687	52,334	19,908
OCEANIA	17,801	29,401	13,175	22,069	8,385	3,042	10,285
OTHER	146	---	-6	3	---	---	-2

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IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0812 BRAN, POLLARD AND SHARPS							
WORLD	519,413	483,996	591,030	369,949	273,039	317,023	
NORTH AMERICA	31,184	58,162	16,106	32,175	43,060	34,524	34,918
UNITED STATES	20,091	14,969	1,814	5,881	7,806	1,678	571
CANADA	11,093	43,193	14,292	26,294	35,254	32,846	34,347
EUROPE	159,416	121,838	242,064	141,175	86,803	79,219	88,956
EEC	10,177	17,442	182,872	114,180	61,546	57,262	67,537
FRANCE	120	---	6,959	14,361	8,972	6,846	4,979
GERMANY	3,970	12,842	161,401	86,481	45,786	47,576	53,432
NETHERLANDS	2,230	1,921	9,479	9,471	3,584	1,925	4,055
EFTA	3,307	5,104	4,950	5,971	9,617	14,762	5,223
DENMARK	3,297	2,728	4,752	5,971	9,600	9,331	5,223
EASTERN EUROPE	124,139	73,665	35,777	10,501	2,347	1,030	5,945
USSR	122,653	71,538	34,919	10,499	---	---	258
OTHER EUROPE	21,793	25,627	18,465	10,523	13,293	6,165	10,251
IRELAND	13,314	18,094	18,105	9,398	6,020	5,758	4,572
LATIN AMERICA	62,182	146,794	21,923	141,968	22,344	14,785	16,256
CACM	---	---	---	---	---	---	---
LAFTA	56,587	141,382	16,705	138,911	19,303	10,525	10,804
ARGENTINA	56,440	141,382	16,705	138,911	19,278	10,450	10,804
OTHER LATIN AMERICA	5,595	5,412	5,218	3,057	3,041	4,260	5,452
AFRICA	84,100	82,184	103,253	119,723	86,178	78,176	89,376
UNION S. AFRICA	18,147	31,994	29,147	46,335	29,924	27,975	35,432
ALGERIA	15,660	891	5,449	11,498	8,920	5,572	2,974
SUDAN	1,913	615	3,526	14,253	4,140	---	4,536
SENEGAL	2,118	20,679	19,289	7,855	1,632	1,253	540
NIGERIA	---	7,322	20,600	18,523	26,808	31,892	36,941
ANGOLA	9,416	11,170	10,133	4,188	5,661	6,419	3,717
ASIA	86,364	98,179	97,661	142,823	131,564	66,335	80,233
INDIA	34,734	46,280	40,501	42,918	62,421	55,415	56,167
BURMA	51,307	50,519	56,544	92,096	67,093	9,749	17,022
OCEANIA	13,103	12,255	2,991	13,169	---	---	7,282
AUSTRALIA	13,103	12,255	2,991	13,169	---	---	7,282
OTHER		1	-2	-3	---	---	2

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0813 OILSEED CAKE AND MEAL							
WORLD	2,272,189	2,461,757	2,406,568	2,485,644	2,718,562	2,797,856	2,537,223
NORTH AMERICA	232,639	376,447	429,915	389,664	521,024	454,107	337,490
UNITED STATES	96,639	172,961	200,674	184,807	259,914	253,302	180,040
CANADA	136,000	203,486	229,241	204,857	261,110	200,805	157,450
EUROPE	627,466	584,179	537,298	604,491	669,338	925,201	970,473
EEC	205,954	220,813	220,356	316,676	349,017	464,139	425,136
GERMANY	150,728	149,765	157,368	243,967	266,136	342,400	289,907
ITALY	18,758	45,774	28,636	23,720	33,003	67,771	72,402
NETHERLANDS	22,787	20,696	20,516	26,174	21,458	22,898	43,619
EFTA	71,763	94,209	105,110	128,053	119,788	109,859	163,795
DENMARK	60,273	88,460	92,882	113,729	111,964	99,392	110,341
EASTERN EUROPE	238,985	131,524	64,693	15,489	27,357	157,299	150,171
USSR	232,453	126,796	60,922	8,768	22,410	152,506	135,090
OTHER EUROPE	110,764	137,633	147,139	144,273	173,176	193,904	231,371
TURKEY	105,470	134,054	143,742	140,872	169,440	190,079	223,909
LATIN AMERICA	377,791	398,035	370,043	399,469	418,858	453,244	400,365
CACM	19,879	29,539	32,515	32,856	47,784	50,704	74,076
LAFTA	341,154	352,413	324,753	345,307	365,221	380,799	301,076
ARGENTINA	234,239	244,347	214,854	247,428	235,496	287,046	235,871
MEXICO	32,429	33,430	23,047	35,359	42,478	8,845	5,669
OTHER LATIN AMERICA	16,758	16,083	12,775	21,306	5,853	21,741	25,213
AFRICA	328,795	300,240	295,910	394,902	453,410	409,676	411,442
ALGERIA	25,882	23,220	22,756	27,793	31,331	28,619	26,745
SENEGAL	35,051	13,354	27,703	45,152	62,132	47,964	37,578
NIGERIA	80,214	90,848	89,159	150,647	165,313	149,176	142,958
UGANDA	---	---	29,976	43,171	45,604	42,901	33,698
TANZANIA	---	---	25,039	43,469	46,044	49,203	49,256
ASIA	701,554	798,119	766,306	690,940	649,977	554,712	416,499
PAKISTAN	25,979	33,105	32,887	29,274	32,752	40,675	45,947
INDIA	392,406	443,553	431,259	364,909	394,873	314,465	220,249
BURMA	153,878	170,177	159,820	107,898	55,188	44,205	28,091
INDONESIA	19,737	10,973	8,034	49,733	43,790	35,083	50,565
PHILIPPINES	35,688	33,245	40,637	41,283	34,797	26,494	26,356
SYRIA	31,113	43,529	44,465	61,322	52,930	52,319	16,912
IRAN	29,713	43,380	28,490	19,427	20,759	32,886	19,162
OCEANIA	3,798	4,739	7,102	6,179	5,957	914	957
OTHER	146	-2	-6	-1	-2	2	-3

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IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0814 MEAT AND FISH MEAL							
WORLD	386,334	424,642	545,960	552,230	511,197	619,026	
NORTH AMERICA	13,574	15,177	7,983	12,992	20,277	13,714	11,397
CANADA	7,655	12,009	7,297	11,312	19,012	13,442	10,863
EUROPE	152,627	112,232	181,221	246,969	275,693	307,718	369,657
EEC	9,880	7,458	19,266	18,933	21,719	25,402	23,643
FRANCE	2,101	301	5,472	6,528	8,768	7,741	9,392
GERMANY	2,921	1,738	5,142	5,490	5,127	9,734	7,889
EFTA	99,421	62,083	101,480	150,645	175,288	168,515	243,514
DENMARK	26,584	28,688	41,540	44,514	47,907	47,189	61,184
NORWAY	71,348	32,520	56,896	104,277	122,766	115,391	178,743
EASTERN EUROPE	680	640	567	554	506	279	300
OTHER EUROPE	42,646	42,051	59,908	76,837	78,180	113,522	102,200
ICELAND	41,267	40,653	55,726	73,201	73,226	103,482	88,552
IRELAND	1,364	1,398	4,182	3,636	4,954	9,902	13,648
LATIN AMERICA	101,832	127,504	138,010	153,994	134,348	77,217	85,445
CACM	---	---	---	---	---	---	---
LAFTA	91,182	119,522	138,010	153,994	134,348	77,019	84,851
ARGENTINA	4,439	4,321	15,924	10,768	6,773	7,314	7,943
CHILE	2,664	10,999	15,637	22,759	10,173	10,261	16,800
PERU	83,326	103,558	105,879	120,256	116,104	58,733	59,975
OTHER LATIN AMERICA	10,650	7,982	---	---	---	198	594
AFRICA	78,034	119,837	94,526	128,153	119,229	110,131	151,394
UNION S. AFRICA	67,428	110,729	87,758	115,036	109,030	96,370	136,924
ANGOLA	9,279	8,401	5,529	11,651	8,722	11,622	12,288
ASIA	498	566	723	2,113	1,507	2,033	438
OCEANIA	759	11,018	2,182	1,734	1,172	385	694
OTHER		---	-3	5	4	-1	1

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 091- MARGARINE AND SHORTENING							
WORLD	184,293	210,707	237,658	308,067	227,317	199,044	200,810
NORTH AMERICA	134,430	156,334	195,385	258,463	117,011	55,104	74,534
UNITED STATES	134,060	156,215	195,296	249,146	116,808	54,373	74,418
EUROPE	49,743	54,313	42,158	48,557	110,283	143,263	126,239
EEC	31,052	30,230	25,138	33,256	80,011	80,885	72,641
BELGIUM-LUXEMBOURG	5,137	10,796	5,602	10,940	49,167	46,773	42,639
FRANCE	18,073	10,803	9,925	7,594	8,358	7,830	7,228
GERMANY	1,996	4,655	6,345	6,815	4,090	7,189	7,448
ITALY	16	3	2	58	9,645	7,152	370
NETHERLANDS	5,830	3,973	3,264	7,849	8,751	11,941	14,956
EFTA	13,309	15,014	13,788	13,901	20,828	23,256	18,971
DENMARK	7,056	8,075	6,965	5,596	11,375	13,258	10,488
NORWAY	5,114	4,834	4,775	5,688	6,344	5,566	5,677
EASTERN EUROPE	4,382	7,842	1,661	---	7,623	37,107	33,257
POLAND	4,338	7,831	1,524	---	4,999	18,317	10,117
ROMANIA	---	10	127	---	2,507	16,868	19,511
OTHER EUROPE	1,000	1,227	1,571	1,400	1,821	2,015	1,370
LATIN AMERICA	5	---	---	---	---	2	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	1	---
OTHER LATIN AMERICA	5	---	---	---	---	1	---
AFRICA	81	5	4	637	---	---	3
ASIA	24	18	5	66	13	648	18
OCEANIA	5	31	103	346	3	31	17
OTHER	5	6	3	-2	7	-4	-1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0913 LARD, ETC.							
WORLD	176,203	202,580	228,539	283,281	217,713	189,330	192,376
NORTH AMERICA	134,298	156,259	195,097	249,108	116,924	54,890	74,437
UNITED STATES	134,031	156,140	195,084	249,108	116,721	54,198	74,321
EUROPE	41,823	46,313	33,422	34,165	100,781	133,792	117,937
EEC	29,209	28,136	21,974	25,418	76,975	77,836	70,307
BELGIUM-LUXEMBOURG	4,979	10,553	5,033	8,270	48,801	46,401	42,251
FRANCE	18,061	10,803	9,906	7,549	8,321	7,769	7,156
GERMANY	897	3,550	4,690	4,954	2,039	5,111	6,202
ITALY	16	3	---	56	9,643	7,150	369
NETHERLANDS	5,256	3,227	2,345	4,589	8,171	11,405	14,329
EFTA	7,936	9,932	8,854	7,603	14,707	17,701	13,201
DENMARK	6,848	7,985	6,879	5,577	11,356	13,236	10,460
EASTERN EUROPE	4,382	7,832	1,661	---	7,623	37,107	33,257
POLAND	4,338	7,831	1,524	---	4,999	18,317	10,117
ROMANIA	---	---	127	---	2,507	16,868	19,511
OTHER EUROPE	296	413	933	1,144	1,476	1,148	1,172
LATIN AMERICA	---	---	---	---	---	1	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	1	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	78	5	1	1	---	---	3
ASIA	---	---	---	1	1	628	2
OCEANIA	---	---	16	6	3	20	---
OTHER	4	3	3	---	4	-1	-3

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 1121 WINE OF FRESH GRAPES							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 1123 BEER							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 121- TOBACCO, UNMANUFACTURED							
WORLD	218,135	188,202	208,916	210,871	196,471	187,891	198,763
NORTH AMERICA	117,083	94,511	110,036	109,711	86,456	114,684	115,826
UNITED STATES	100,954	78,063	94,825	91,194	69,151	95,870	94,461
CANADA	16,129	16,448	15,211	18,517	17,305	18,814	21,365
EUROPE	17,751	12,905	12,976	13,602	15,737	17,509	16,752
EEC	3,103	2,689	2,574	3,290	4,251	4,013	5,225
EASTERN EUROPE	4,608	3,184	3,537	3,026	4,075	4,822	5,476
OTHER EUROPE	9,862	6,925	6,810	7,218	7,334	8,670	5,989
GREECE	5,966	4,506	3,680	4,837	4,498	3,738	3,906
TURKEY	3,889	2,405	3,122	2,376	2,814	3,396	2,044
LATIN AMERICA	6,468	6,588	6,596	9,245	8,737	6,793	9,273
CACM	---	---	1	5	3	3	8
LAFTA	5,519	5,742	5,278	8,137	7,288	5,583	7,635
BRAZIL	4,723	4,698	4,140	6,698	5,786	4,277	6,654
OTHER LATIN AMERICA	949	846	1,317	1,103	1,446	1,207	1,630
AFRICA	52,501	50,459	55,801	56,598	62,851	28,395	20,206
UNION S. AFRICA	1,549	2,272	1,381	1,832	3,571	3,916	4,893
MALAWI	---	---	---	332	6,344	7,091	5,868
SO. RHODESIA	49,413	46,188	52,131	52,471	44,150	11,094	1,598
ASIA	24,332	23,733	23,406	21,664	22,665	20,461	36,690
INDIA	20,485	18,849	18,322	16,246	16,776	14,169	25,078
INDONESIA	2,705	3,065	2,973	3,081	3,357	2,982	2,866
OCEANIA	---	---	102	53	18	45	20
OTHER	---	6	-1	-2	7	4	-4

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 211- HIDES AND SKINS, CRUDE							
WORLD	138,302	129,977	144,740	165,598	153,551	137,273	129,428
NORTH AMERICA	16,964	7,638	10,516	29,740	23,545	15,822	14,921
UNITED STATES	11,994	6,015	8,263	24,106	18,194	13,405	11,611
CANADA	4,970	1,623	2,253	5,634	5,351	2,417	3,310
EUROPE	57,689	58,823	69,260	69,601	71,707	71,512	71,923
EEC	28,983	27,016	30,494	33,371	33,964	29,551	26,848
FRANCE	5,234	2,969	3,409	3,819	3,691	2,594	3,778
GERMANY	12,015	12,994	14,906	16,088	15,113	12,569	11,124
ITALY	4,818	4,048	3,793	4,647	3,903	3,513	2,956
NETHERLANDS	6,313	5,998	7,560	7,886	10,023	9,360	7,970
EFTA	17,515	22,800	23,906	18,899	18,315	20,557	21,544
DENMARK	6,620	9,709	10,247	8,241	7,225	7,723	9,873
NORWAY	3,537	4,099	4,335	3,531	4,122	3,911	3,390
SWEDEN	2,584	3,769	4,431	3,102	3,200	4,274	3,012
SWITZERLAND	2,748	2,449	2,512	2,096	2,007	2,584	2,431
UNITED KINGDOM	1,749	2,273	1,967	1,556	1,118	1,613	2,431
EASTERN EUROPE	841	779	2,388	2,297	3,802	4,751	2,121
POLAND	367	255	1,805	1,470	2,503	3,753	1,479
OTHER EUROPE	10,350	8,228	12,472	15,034	15,626	16,653	21,410
IRELAND	7,339	4,912	7,439	8,116	8,747	11,212	14,449
FINLAND	1,064	1,735	2,936	2,463	3,832	3,194	4,367
LATIN AMERICA	19,056	21,177	20,133	13,935	11,163	9,281	7,554
CACM	9	---	12	7	---	---	---
LAFTA	18,542	20,655	19,381	13,469	10,809	8,925	7,391
ARGENTINA	13,562	16,691	15,850	8,401	5,375	5,500	5,182
BRAZIL	1,034	934	850	1,507	2,655	2,014	1,177
URUGUAY	2,713	2,226	1,195	2,547	1,765	704	285
OTHER LATIN AMERICA	505	522	740	459	354	356	163
AFRICA	22,524	20,570	19,525	21,675	20,125	19,672	15,352
UNION S. AFRICA	9,019	8,036	7,762	8,371	7,991	8,444	6,519
NIGERIA	2,148	1,721	1,508	1,731	1,464	1,527	882
ANGOLA	1,692	1,735	1,852	2,016	1,539	2,313	1,932
ETHIOPIA	2,397	2,435	2,161	2,775	2,346	2,573	1,736
ASIA	4,394	4,706	6,317	6,270	4,729	4,365	2,420
OCEANIA	17,665	17,042	18,992	24,371	22,270	16,626	17,240
AUSTRALIA	10,331	9,733	11,804	15,430	11,165	8,637	6,849
NEW ZEALAND	7,334	7,308	7,188	8,938	11,105	7,989	10,391
OTHER	10	21	-3	6	12	-5	18

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY UNION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 221- OILSEEDS, ETC.							
WORLD	1,779,548	1,950,333	1,962,267	1,881,036	1,922,991	1,772,041	1,768,689
NORTH AMERICA	591,758	785,406	804,302	855,033	951,838	839,573	896,863
UNITED STATES	341,855	561,884	623,445	657,817	709,937	612,783	713,098
CANADA	249,903	223,522	180,857	197,216	241,901	226,790	183,765
EUROPE	24,700	28,085	39,968	40,153	65,312	100,782	111,840
EEC	10,553	13,664	18,939	21,593	31,372	65,601	66,911
NETHERLANDS	6,706	5,073	11,011	9,992	13,321	43,175	55,158
EASTERN EUROPE	8,983	7,995	10,385	8,613	22,197	25,900	37,068
OTHER EUROPE	3,664	2,261	2,482	1,682	1,527	1,952	1,795
LATIN AMERICA	16,459	10,235	22,226	5,853	20,161	5,542	34,683
CACM	5,552	2,555	8,392	80	7,620	513	3
LAFTA	10,789	5,838	13,833	5,773	9,694	5,010	34,552
OTHER LATIN AMERICA	118	1,842	1	---	2,847	19	128
AFRICA	745,412	831,292	853,520	697,151	647,279	576,535	502,981
UNION S. AFRICA	19,103	19,143	26,641	35,498	6,372	4,913	23,455
SUDAN	71,085	136,623	125,017	38,754	40,635	17,040	29,779
SIERRA LEONE	44,874	44,846	34,604	30,410	26,069	21,606	13,034
NIGERIA	412,741	430,617	482,228	430,758	431,090	337,809	271,470
ANGOLA	72,326	70,280	62,872	66,710	41,831	31,567	27,178
MOZAMBIQUE	35,396	33,536	36,186	22,173	21,397	19,803	22,782
ASIA	310,594	224,478	165,836	228,259	178,745	188,012	174,435
CHINA MAINLAND	129,357	72,064	1,668	77,576	21,427	29,665	58,098
INDONESIA	24,222	9,693	11,203	39,945	30,338	9,282	13,831
PHILIPPINES	115,049	77,909	114,072	81,087	104,137	125,584	88,212
OCEANIA	90,610	70,835	76,417	54,577	59,660	61,591	47,880
AUSTRALIA	44,530	35,894	40,472	35,877	40,983	39,261	27,620
BRIT. AOC OCEANIA	37,862	27,481	29,166	14,970	16,257	18,661	19,516
OTHER	15	2	-2	10	-4	6	7

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2211 PEANUTS, GREEN							
WORLD	354,148	380,537	357,376	296,488	269,829	276,348	320,537
NORTH AMERICA	6,820	14,423	16	2,706	6,787	13,143	8,316
UNITED STATES	6,453	13,731	16	2,706	6,640	13,143	8,138
EUROPE	4,834	5,618	1,724	2,803	2,254	3,430	4,050
EEC	2,315	2,860	779	2,076	1,352	2,819	3,453
EASTERN EUROPE	1,963	1,606	---	20	---	---	---
OTHER EUROPE	445	1,024	922	672	830	581	423
LATIN AMERICA	1,878	2,646	3,095	2,205	8,768	3,766	2,874
CACM	---	---	---	---	---	---	---
LAFTA	1,878	2,646	3,094	2,205	6,232	3,748	2,827
OTHER LATIN AMERICA	---	---	1	---	2,536	18	47
AFRICA	305,193	327,111	336,919	273,786	241,398	243,500	293,645
UNION S. AFRICA	17,711	15,106	24,003	35,091	6,168	4,033	22,992
SUDAN	837	2,437	18,169	7,658	15,205	8,028	13,749
SENEGAL	8,555	---	---	---	5,090	34,728	14,048
GAMBIA	---	---	4,943	4,532	10,907	21,769	24,338
NIGERIA	187,430	223,470	229,130	168,281	162,055	131,300	160,530
ANGOLA	44,225	41,454	38,753	35,242	16,638	13,170	13,272
MALAWI	---	---	---	64	14,861	13,853	25,554
SO. RHODESIA	7,256	10,821	15,679	14,631	162	3	---
BR. AOC AFR. NES	31,492	27,842	15	5	---	---	---
ASIA	35,351	30,665	15,626	14,983	10,623	12,508	11,615
CHINA MAINLAND	358	627	1	1,065	6,584	9,338	9,358
INDIA	10,475	15,559	12,374	10,279	27	1	80
PHILIPPINES	15,282	8,864	---	---	---	---	---
OCEANIA	71	74	---	8	---	---	34
OTHER	1	---	-4	-3	-1	1	3

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2212 COPRA							
WORLD		183,549	229,736	203,290	211,523	216,219	168,992
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	353	896	745	9	---	---	---
EEC	---	---	---	9	---	---	---
EASTERN EUROPE	3	---	---	---	---	---	---
OTHER EUROPE	---	---	3	---	---	---	---
LATIN AMERICA	117	121	---	---	269	---	---
CACM	---	49	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	117	72	---	---	269	---	---
AFRICA	37,988	33,442	27,747	28,161	18,821	20,994	22,246
ANGOLA	5,626	5,998	4,780	7,004	6,458	4,482	4,556
MOZAMBIQUE	28,582	25,508	20,972	17,125	11,908	14,730	16,012
ASIA	132,547	78,331	124,882	120,582	134,440	133,691	98,958
MALAYSIA INC. SINGAP	14,969	4,240	1,186	---	---	---	---
INDONESIA	17,810	4,995	9,254	39,434	30,287	8,107	10,743
PHILIPPINES	99,767	69,045	114,072	81,087	104,137	125,584	88,212
OCEANIA	90,537	70,761	76,360	54,538	57,995	61,533	47,791
AUSTRALIA	44,457	35,825	40,415	35,843	40,980	39,259	27,582
NEW ZEALAND	8,218	7,455	6,779	3,725	758	3,664	744
BRIT. AOC OCEANIA	37,862	27,481	29,166	14,970	16,257	18,610	19,465
OTHER		-2	2	---	-2	1	-3

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2213 PALM NUTS AND KERNELS							
WORLD		244,889	248,899	237,835	245,129	205,041	126,012
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	508	---	---	---
EEC	---	---	---	---	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	508	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	249,519	238,224	243,729	236,819	243,407	200,876	115,465
SIERRA LEONE	44,874	44,846	34,452	30,189	25,979	21,606	13,034
NIGERIA	181,758	162,317	187,069	183,382	198,889	165,940	90,413
ANGOLA	16,160	20,340	16,032	20,607	16,627	10,545	6,624
ASIA	5,916	6,663	5,170	507	1,722	4,165	10,547
MALAYSIA INC. SINGAP	4,142	4,482	3,650	10	1,722	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		2	---	1	---	---	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2214 SOYBEANS							
WORLD		705,850	714,518	785,042	828,376	737,659	878,856
NORTH AMERICA	419,421	619,254	675,244	699,011	793,736	681,112	760,810
UNITED STATES	333,882	547,226	614,354	636,752	697,808	586,888	691,146
CANADA	85,539	72,028	60,890	62,259	95,928	94,224	69,664
EUROPE	367	161	6,007	2,260	7,161	33,856	47,817
EEC	362	161	5,989	2,256	7,160	33,833	47,817
NETHERLANDS	20	11	5,818	1,965	6,356	33,678	44,234
EASTERN EUROPE	5	---	---	---	---	---	---
OTHER EUROPE	---	---	18	---	---	---	---
LATIN AMERICA	---	1,770	6,382	---	---	---	31,233
CACM	---	---	---	---	---	---	---
LAFTA	---	---	6,382	---	---	---	31,233
OTHER LATIN AMERICA	---	1,770	---	---	---	---	---
AFRICA	7,638	14,430	26,881	8,836	14,356	14,733	5,939
NIGERIA	7,041	14,020	26,881	8,754	14,356	14,733	5,916
ASIA	128,461	70,232	4	74,931	13,123	7,906	33,002
CHINA MAINLAND	128,461	70,232	1	74,928	13,121	7,898	32,998
OCEANIA	---	---	---	---	---	51	51
OTHER		3	---	4	---	1	4

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2216 COTTONSEED							
WORLD	196,143	191,467	117,638	113,182	56,253	33,121	
NORTH AMERICA	---	---	---	6	5	3	---
EUROPE	4,624	1,565	101	---	124	5	3
EEC	---	---	---	---	94	5	---
EASTERN EUROPE	2,047	838	---	---	---	---	---
OTHER EUROPE	2,577	727	101	---	---	---	3
LATIN AMERICA	5,552	2,506	8,390	80	7,620	958	---
CACM	5,552	2,506	8,390	80	7,620	513	---
GUATEMALA	1,501	---	8,390	80	---	---	---
NICARAGUA	3,780	2,506	---	---	7,620	---	---
LAFTA	---	---	---	---	---	445	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	119,425	173,816	166,105	103,351	89,245	45,948	29,323
SUDAN	70,243	133,443	105,104	30,136	24,709	6,326	9,853
IVORY COAST	3,249	2,568	6,859	2,701	9,167	6,627	4,017
TOGO	3,244	2,180	3,549	1,643	1,430	1,762	1,500
DAHOMEY	1,097	836	1,572	2,443	872	2,293	384
NIGERIA	26,921	21,352	24,025	56,032	34,449	15,107	5,582
ANGOLA	4,380	948	1,307	1,402	430	1,863	30
ETHIOPIA	1,596	3,099	2,995	989	---	853	---
MOZAMBIQUE	5,332	6,655	14,881	3,312	7,428	4,876	5,131
ASIA	7,276	18,255	16,872	14,202	16,188	9,341	3,795
SYRIA	995	8,993	1,517	---	---	---	---
ISRAEL	---	---	---	985	2,068	6,808	2,906
YEMEN	1,042	2,741	1,611	2,827	2,723	460	---
FED. SOUTH ARABIA	5,138	6,521	13,742	10,390	11,382	2,073	878
OCEANIA	---	---	---	---	---	---	---
OTHER		1	-1	-1	---	-2	---

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2217 CASTOR OIL SEEDS							
WORLD		21,192	31,897	19,639	10,686	31,668	30,917
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	---	102	88	494
EEC	---	---	---	---	102	88	494
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	745	1,229	987	2,803	1,999	125	295
CACM	---	---	---	---	---	---	---
LAFTA	745	1,229	987	2,803	1,983	125	295
ECUADOR	508	406	305	2,546	1,512	---	203
PERU	237	823	682	257	174	125	92
OTHER LATIN AMERICA	---	---	---	---	16	---	---
AFRICA	10,916	17,251	30,404	15,610	8,385	22,507	16,516
UNION S. AFRICA	1,152	3,838	2,295	---	---	---	---
SUDAN	---	711	1,102	91	---	2,667	5,190
NIGERIA	807	814	729	171	126	318	36
ANGOLA	123	189	250	287	333	102	293
UGANDA	---	---	799	527	620	609	630
KENYA	---	---	8,081	6,298	4,008	6,076	2,841
TANZANIA	---	---	17,024	8,135	3,232	12,720	7,476
BR. AOC AFR. NES	---	11,394	---	---	---	---	---
ASIA	198	2,713	508	1,224	200	8,947	13,613
CHINA MAINLAND	---	---	---	---	---	8,947	13,613
THAILAND	147	2,713	---	1,111	200	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		-1	-2	2	---	1	-1

TABLE 5 - CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 262- WOOL AND HAIR							
WORLD	361,865	354,925	368,907	332,606	326,404	305,210	298,627
NORTH AMERICA	6,671	4,825	4,900	1,974	3,417	4,465	3,218
UNITED STATES	6,048	4,310	4,272	1,509	3,185	4,308	3,147
EUROPE	53,797	51,986	64,986	50,391	50,562	47,836	42,842
EEC	24,660	24,635	31,208	24,237	22,990	23,271	21,397
BELGIUM-LUXEMBOURG	4,820	5,848	6,329	4,695	5,131	4,532	3,935
FRANCE	11,313	10,550	13,297	10,297	9,350	9,312	8,497
GERMANY	5,077	4,724	6,200	5,159	4,457	4,909	4,245
EFTA	14,013	13,808	15,440	14,209	13,008	12,307	11,101
UNITED KINGDOM	10,845	10,214	11,180	10,458	8,862	8,557	7,539
EASTERN EUROPE	1,879	2,076	2,975	2,406	1,672	2,635	2,062
OTHER EUROPE	13,245	11,467	15,363	9,539	12,892	9,623	8,282
IRELAND	8,028	7,700	8,095	5,531	8,573	6,450	5,564
LATIN AMERICA	66,116	54,882	52,564	42,076	54,734	62,661	70,039
CACM	---	---	---	---	---	---	---
LAFTA	63,506	52,573	49,897	39,585	52,211	60,154	67,463
ARGENTINA	27,859	30,724	23,382	16,394	21,918	29,758	26,571
CHILE	7,453	4,227	4,251	3,734	3,130	3,070	2,900
URUGUAY	25,984	15,170	19,349	13,566	23,758	22,213	29,053
OTHER LATIN AMERICA	2,610	2,309	2,667	2,491	2,523	2,507	2,576
AFRICA	30,508	28,275	27,105	30,860	31,299	26,618	24,232
UNION S. AFRICA	28,836	26,446	25,397	29,338	30,228	25,784	23,534
ASIA	16,504	17,363	22,173	27,949	23,979	23,136	15,897
CHINA MAINLAND	2,807	4,292	9,304	13,752	13,851	13,541	6,566
PAKISTAN	6,381	7,140	7,337	5,099	4,269	4,106	4,705
INDIA	5,330	4,252	3,559	6,426	3,594	3,559	3,238
OCEANIA	188,271	197,591	197,182	179,357	162,400	140,506	142,392
AUSTRALIA	109,760	116,825	119,837	108,680	92,826	71,540	85,226
NEW ZEALAND	78,511	80,766	77,345	70,677	69,571	68,966	57,166
OTHER	-2	3	-3	-1	13	-12	7

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2631 RAW COTTON EXCLUDING LINTERS							
WORLD	415,825	391,912	400,466	426,853	390,354	382,292	339,845
NORTH AMERICA	174,706	94,100	88,104	121,477	80,660	66,605	68,119
UNITED STATES	174,706	94,100	88,104	121,477	80,660	66,572	68,119
EUROPE	19,026	44,386	62,297	74,265	89,674	88,072	67,259
EEC	1,517	2,701	2,609	2,488	2,221	4,177	2,754
EASTERN EUROPE	6,661	7,673	5,974	8,085	18,655	22,453	18,052
USSR	6,024	7,151	5,809	8,085	16,978	22,428	16,925
OTHER EUROPE	10,769	33,884	53,660	63,065	68,252	61,354	46,395
TURKEY	10,145	25,725	44,814	54,193	64,810	55,801	40,858
LATIN AMERICA	76,563	117,926	99,706	91,422	92,812	102,206	72,625
CACM	5,747	12,758	12,364	22,721	20,689	28,966	16,817
GUATEMALA	1,621	3,255	5,463	6,308	4,129	11,547	7,754
NICARAGUA	3,929	8,556	6,699	16,209	15,330	16,199	8,831
LAFTA	70,545	104,557	87,032	67,973	71,608	72,787	55,781
ARGENTINA	3,694	12,820	10,731	1,346	1,084	1,356	2,503
BRAZIL	21,250	27,004	20,950	22,455	22,793	19,820	12,789
COLOMBIA	5,835	9,677	5,493	3,821	7,780	3,920	12,725
MEXICO	13,589	25,945	19,990	9,090	16,647	20,393	9,672
PERU	25,090	28,788	28,045	29,289	22,131	26,844	17,771
OTHER LATIN AMERICA	271	611	310	728	515	453	27
AFRICA	107,634	90,888	111,945	92,673	91,027	86,256	104,886
EGYPT	9,429	10,887	14,360	15,370	13,950	12,233	16,081
SUDAN	26,068	26,354	27,926	18,666	13,553	10,940	18,762
NIGERIA	17,091	10,368	17,099	8,001	5,229	6,599	4,628
ANGOLA	4,919	3,935	5,744	3,090	4,466	4,950	6,337
MOZAMBIQUE	42,286	29,097	36,289	28,526	36,211	27,665	37,986
ASIA	37,902	44,605	38,415	47,016	36,180	39,151	26,957
PAKISTAN	2,025	3,428	7,404	15,242	7,650	8,330	7,249
SYRIA	10,856	11,475	8,383	3,078	5,146	3,577	1,580
IRAN	17,649	21,201	13,149	19,710	17,056	19,234	9,449
OCEANIA	---	10	---	---	---	3	1
OTHER	-6	-3	-1	---	1	-1	-2

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 265- VEGETABLE FIBERS EXC. COTTON AND JUTE							
WORLD	257,668	279,869	286,716	282,695	265,437	244,337	231,395
NORTH AMERICA	528	25	187	3	24	166	66
EUROPE	61,985	65,630	63,515	60,608	62,999	58,822	49,462
EEC	40,644	44,144	42,961	44,458	44,222	35,200	32,255
BELGIUM-LUXEMBOURG	29,550	31,935	31,665	32,966	29,730	26,116	23,148
FRANCE	3,350	4,923	4,074	4,920	8,613	5,029	5,733
NETHERLANDS	3,953	4,438	3,841	3,412	3,540	2,428	1,747
EASTERN EUROPE	19,636	20,042	18,929	14,986	16,735	21,666	15,904
USSR	16,066	14,842	11,317	10,395	11,371	15,766	10,890
POLAND	1,340	3,634	3,801	2,632	3,038	3,072	3,131
OTHER EUROPE	291	128	318	124	451	330	379
LATIN AMERICA	7,000	10,352	10,881	11,426	14,592	16,140	21,013
CACM	---	---	---	---	---	---	---
LAFTA	6,917	10,331	10,833	11,029	13,968	15,941	18,982
BRAZIL	6,243	9,502	8,892	10,917	13,965	15,930	18,871
OTHER LATIN AMERICA	83	21	48	397	624	199	2,031
AFRICA	133,460	141,004	146,990	134,329	126,879	123,119	102,848
ANGOLA	27,806	34,908	33,640	31,389	32,924	34,947	28,201
KENYA	---	---	24,928	11,397	11,220	12,274	8,637
TANZANIA	---	---	77,183	78,526	71,986	63,262	56,643
MOZAMBIQUE	6,301	3,434	5,509	6,009	7,544	9,612	7,736
OTHER AFR. NES	503	99,663	961	622	857	612	30
ASIA	54,686	62,851	65,145	76,325	60,945	46,084	57,980
INDIA	1,200	5,522	6,512	8,262	4,315	1,995	4,277
CEYLON	28,281	24,027	26,317	32,515	26,940	22,161	22,208
THAILAND	3,254	11,151	3,853	4,823	10,692	4,266	14,710
PHILIPPINES	17,299	18,798	23,076	24,504	16,697	14,748	12,547
OCEANIA	---	---	---	---	---	---	25
OTHER	9	7	-2	4	-2	6	1

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2921 PLANTS FOR DYEING, ETC.							
WORLD	43,340	44,244	10,372	17,167	17,005	14,101	9,696
NORTH AMERICA	654	1,117	13	187	56	59	67
EUROPE	24,142	23,533	1,429	1,505	2,204	613	496
EEC	14,705	15,005	821	967	1,577	236	218
BELGIUM-LUXEMBOURG	1,413	1,547	74	---	---	2	2
FRANCE	3,247	3,179	377	430	329	112	64
GERMANY	2,005	2,033	137	237	284	70	103
ITALY	4,010	3,671	216	300	963	15	48
NETHERLANDS	4,030	4,575	17	---	1	37	1
EFTA	3,791	3,640	293	213	216	71	55
AUSTRIA	2,212	1,816	284	202	187	68	48
DENMARK	1,075	1,307	---	---	---	---	---
EASTERN EUROPE	4,167	3,337	11	14	16	21	7
HUNGARY	2,297	1,329	4	3	2	13	3
OTHER EUROPE	1,479	1,551	304	311	395	285	216
TURKEY	905	927	242	191	270	235	191
LATIN AMERICA	1,388	834	869	1,561	1,792	1,449	1,034
CACM	5	9	---	---	---	---	---
LAFTA	1,382	822	861	1,553	1,755	1,442	1,006
PERU	1,004	497	830	1,336	1,495	1,323	933
OTHER LATIN AMERICA	1	3	8	8	37	7	28
AFRICA	2,617	1,289	380	150	253	47	91
MOROCCO	1,496	385	1	---	---	---	---
ASIA	14,437	17,409	7,661	13,745	12,695	11,905	8,008
CHINA MAINLAND	126	862	356	620	596	582	450
INDIA	12,997	15,824	7,070	12,481	11,268	10,614	7,194
CYPRUS	195	104	151	332	507	371	94
OCEANIA	97	63	21	22	4	21	---
OTHER	5	-1	-1	-3	1	7	---

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 411- ANIMAL OILS AND FATS							
WORLD	355,192	381,983	429,199	443,793	441,151	381,854	477,318
NORTH AMERICA	68,774	46,128	101,351	108,201	97,361	65,001	61,613
UNITED STATES	43,613	39,077	79,703	72,299	73,044	46,690	35,918
CANADA	25,161	7,051	21,648	35,902	24,317	18,311	25,695
EUROPE	138,331	147,965	180,419	182,104	223,361	254,890	350,625
EEC	50,302	44,807	65,518	39,054	32,852	30,533	25,259
GERMANY	29,673	31,454	40,815	30,065	28,349	24,962	22,796
NETHERLANDS	17,438	11,878	23,044	7,999	3,098	4,565	1,363
EFTA	56,391	48,604	47,314	60,962	111,267	158,892	236,707
DENMARK	12,126	13,644	22,895	33,072	60,123	52,714	69,240
NORWAY	36,599	23,293	11,286	17,278	35,275	90,338	150,273
SWEDEN	4,532	7,467	6,747	6,766	6,932	7,319	7,194
EASTERN EUROPE	516	164	7,445	12,050	16,527	18,654	17,187
USSR	---	---	7,034	9,674	16,322	18,004	16,751
OTHER EUROPE	31,122	54,390	60,142	70,038	62,715	46,811	71,472
ICELAND	22,250	45,668	50,646	60,916	52,185	36,512	55,952
IRELAND	8,756	8,660	9,170	8,892	10,272	10,126	15,312
LATIN AMERICA	45,262	61,826	49,718	18,964	15,688	6,885	19,707
CACM	---	---	---	---	---	---	---
LAFTA	36,195	61,826	49,718	18,964	15,688	6,885	19,707
PERU	34,750	60,262	48,539	17,481	15,356	4,804	18,304
OTHER LATIN AMERICA	9,067	---	---	---	---	---	---
AFRICA	59,658	51,980	36,694	60,240	51,236	26,171	31,544
UNION S. AFRICA	58,905	51,803	36,309	60,136	50,779	25,957	31,167
ASIA	23,831	33,988	33,817	31,251	17,678	1,076	747
JAPAN	23,826	33,988	33,816	31,063	17,630	1,069	728
OCEANIA	19,335	40,097	27,202	43,032	35,833	27,830	13,075
AUSTRALIA	5,620	22,286	15,100	20,227	18,573	12,570	6,296
NEW ZEALAND	13,715	17,811	12,102	22,805	17,260	15,260	6,779
OTHER	1	-1	-2	1	-6	1	7

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 4113 ANIMAL OILS, FATS, EXC. LARD							
WORLD	85,811	80,769	93,504	127,221	124,236	106,788	92,876
NORTH AMERICA	36,784	14,239	37,649	55,291	59,358	45,581	42,273
UNITED STATES	12,761	8,075	16,679	27,504	39,473	27,946	20,662
CANADA	24,023	6,164	20,970	27,787	19,885	17,635	21,611
EUROPE	28,976	28,259	30,538	31,584	33,056	32,645	37,603
EEC	15,388	13,783	13,901	12,267	14,986	11,530	11,843
GERMANY	12,232	12,506	12,518	11,308	12,075	9,841	10,092
EFTA	4,206	5,605	7,029	7,955	8,698	10,097	10,141
DENMARK	2,287	2,724	2,706	2,713	3,159	5,131	4,690
SWEDEN	637	1,336	3,080	3,049	3,672	3,538	3,693
EASTERN EUROPE	516	164	411	2,365	276	928	439
OTHER EUROPE	8,866	8,707	9,197	8,997	9,096	10,090	15,180
IRELAND	8,744	8,645	8,898	8,652	8,938	9,927	15,062
LATIN AMERICA	812	547	1,143	1,317	138	2,081	1,403
CACM	---	---	---	---	---	---	---
LAFTA	812	547	1,143	1,317	138	2,081	1,403
ARGENTINA	710	451	1,092	1,281	104	2,079	1,403
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	39	61	187	123	70	36	84
ASIA	558	1,075	584	919	1,048	870	649
OCEANIA	18,639	36,588	23,401	37,989	30,570	25,572	10,860
AUSTRALIA	4,940	18,792	11,302	16,452	13,336	10,327	4,102
NEW ZEALAND	13,699	17,796	12,099	21,537	17,234	15,245	6,758
OTHER	3	---	2	-2	-4	3	4

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 421- FIXED VEGETABLE OILS, SOFT							
WORLD	160,386	157,849	180,035	205,909	261,644	297,384	313,272
NORTH AMERICA	22,057	23,570	29,728	29,162	31,977	23,238	16,497
UNITED STATES	6,797	3,476	7,948	17,137	14,909	6,098	958
CANADA	15,260	20,094	21,780	12,025	17,068	17,140	15,539
EUROPE	65,735	71,542	78,971	93,677	92,931	109,871	153,684
EEC	24,783	19,617	19,869	22,028	25,123	30,870	35,805
FRANCE	812	755	829	1,047	3,641	5,018	6,274
GERMANY	12,425	10,243	9,813	11,724	16,004	19,490	15,256
NETHERLANDS	6,964	3,951	6,023	6,519	3,253	4,476	12,868
EFTA	16,881	25,215	22,435	20,214	19,041	15,567	13,196
DENMARK	15,085	19,991	15,499	17,469	14,346	12,380	10,935
EASTERN EUROPE	14,346	18,769	30,379	39,980	33,251	54,552	92,322
USSR	3,647	3,643	10,837	12,785	16,019	28,527	48,365
HUNGARY	4,033	7,082	11,756	13,450	11,584	15,200	18,161
ROMANIA	5,183	7,161	7,725	12,951	5,392	8,939	12,692
OTHER EUROPE	9,725	7,941	6,288	11,455	15,516	8,882	12,361
SPAIN	6,941	5,173	2,413	8,217	11,862	4,512	4,836
FINLAND	2,308	867	1,489	2,247	1,070	2,616	6,900
LATIN AMERICA	11,704	7,601	7,832	1,831	4,409	15,169	20,459
CACM	---	---	50	---	---	---	601
LAFTA	11,584	7,601	7,782	1,831	4,409	15,169	19,858
ARGENTINA	10,777	6,379	4,667	1,737	4,409	15,169	15,850
OTHER LATIN AMERICA	120	---	---	---	---	---	---
AFRICA	51,810	46,217	58,191	69,997	102,528	115,053	112,250
TUNISIA	44	77	282	6,482	9,733	365	155
SUDAN	1,432	429	3,919	6,076	7,866	3,392	246
GAMBIA	---	---	2,879	7,138	8,190	18,964	22,061
NIGERIA	38,708	44,211	46,063	47,711	68,738	87,441	78,276
MOZAMBIQUE	1,091	110	1,810	2,049	7,759	4,673	8,959
ASIA	8,998	8,891	5,308	11,244	29,798	34,043	10,377
CHINA MAINLAND	654	188	---	---	14,195	33,666	9,491
ISRAEL	3,494	2,470	4,215	6,410	5,270	196	726
OCEANIA	82	17	---	---	---	---	---
OTHER	---	11	5	-2	1	10	5

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 422- OTHER FIXED VEGETABLE OILS							
WORLD		307,996	304,446	316,648	313,288	325,156	298,617
NORTH AMERICA	11,637	5,727	8,042	10,318	9,246	12,366	13,134
UNITED STATES	5,430	3,005	5,226	2,417	3,148	6,726	7,609
CANADA	6,207	2,722	2,816	7,901	6,098	5,640	5,525
EUROPE	42,589	62,562	45,705	48,635	44,981	43,632	51,291
EEC	34,210	52,653	39,501	39,792	39,291	39,519	46,087
GERMANY	5,192	5,369	8,895	8,893	8,068	8,449	9,603
NETHERLANDS	28,422	46,867	29,696	30,076	29,724	29,715	33,855
EFTA	5,314	6,919	5,641	4,769	3,587	2,195	2,450
EASTERN EUROPE	2,466	2,734	130	3,322	1,759	1,035	2,294
OTHER EUROPE	599	256	433	752	344	883	460
LATIN AMERICA	39,201	51,410	49,630	40,655	56,527	24,761	21,262
CACM	---	---	---	203	864	---	1,055
LAFTA	39,200	51,410	49,630	40,452	55,662	24,760	20,207
ARGENTINA	30,383	42,699	43,992	28,117	30,921	17,459	15,813
BRAZIL	6,276	6,470	3,647	12,142	24,558	7,183	4,388
OTHER LATIN AMERICA	1	---	---	---	1	1	---
AFRICA	154,674	100,230	89,963	87,064	86,851	125,214	64,355
NIGERIA	130,022	84,044	75,925	71,142	68,818	112,116	42,916
ANGOLA	16,595	12,206	12,223	15,328	13,360	10,579	12,609
ASIA	74,707	55,004	71,010	90,685	81,751	87,108	116,911
CHINA MAINLAND	3,553	2,176	2,824	5,425	6,211	4,723	8,420
INDIA	11,956	9,284	6,280	8,647	375	109	1,488
CEYLON	9,092	3,876	11,410	16,453	11,102	2,944	5,583
MALAYSIA INC. SINGAP	49,644	38,711	47,402	51,581	54,844	---	---
MALAYSIA	---	---	---	---	---	50,599	64,539
SINGAPORE	---	---	---	---	---	15,265	25,684
PHILIPPINES	59	---	1,444	6,842	8,438	12,317	8,651
OCEANIA	21,682	33,062	40,092	39,281	33,923	32,062	31,660
AUSTRALIA	14,496	20,395	22,209	16,774	22,731	20,067	19,229
BRIT. AOC OCEANIA	7,165	12,667	17,883	22,502	11,192	11,995	12,431
OTHER		1	4	10	9	13	4

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION
IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 431- OILS AND FATS, PROCESSED							
WORLD	60,487	60,444	77,912	86,565	95,237	106,839	126,680
NORTH AMERICA	2,323	1,401	2,798	4,422	4,666	7,121	6,869
UNITED STATES	2,264	1,359	1,828	3,772	4,666	6,915	5,645
EUROPE	53,478	54,895	69,138	76,923	86,909	94,694	115,502
EEC	36,514	34,621	30,532	30,692	32,883	34,022	42,892
BELGIUM-LUXEMBOURG	3,426	3,045	4,012	4,290	4,994	4,609	3,163
GERMANY	15,056	15,131	15,290	18,098	17,773	17,958	23,056
NETHERLANDS	17,776	16,236	10,993	8,047	9,574	11,171	16,295
EFTA	14,963	17,922	35,878	40,855	49,364	56,280	67,865
DENMARK	2,090	2,169	2,229	2,291	2,278	2,002	3,357
NORWAY	4,999	5,435	18,260	21,176	33,642	40,511	44,104
SWEDEN	4,819	7,386	12,410	14,349	10,497	10,312	16,513
UNITED KINGDOM	2,242	2,372	2,321	2,311	2,227	2,582	2,224
EASTERN EUROPE	50	304	604	856	274	640	305
OTHER EUROPE	1,951	2,048	2,124	4,520	4,388	3,752	4,440
FINLAND	876	1,270	1,585	3,383	3,932	3,238	3,626
LATIN AMERICA	1,987	1,961	2,103	1,731	1,518	1,832	1,678
CACM	---	---	---	---	---	---	5
LAFTA	1,890	1,828	2,025	1,662	1,428	1,785	1,592
BRAZIL	1,632	1,469	1,419	1,414	1,236	1,559	1,123
OTHER LATIN AMERICA	97	133	78	69	90	47	81
AFRICA	951	599	1,022	728	766	818	649
ASIA	230	177	1,662	1,264	304	512	795
OCEANIA	1,512	1,414	1,179	1,493	1,066	1,853	1,188
AUSTRALIA	1,456	1,349	1,050	1,434	1,031	1,677	1,027
OTHER	6	-3	10	4	8	9	-1

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 5511 ESSENTIAL OILS, ETC.							
WORLD	4,809	4,893	5,435	5,651	5,602	5,072	5,300
NORTH AMERICA	746	865	751	778	848	918	1,036
UNITED STATES	746	865	747	775	844	916	1,032
EUROPE	1,669	1,648	1,727	1,657	1,648	1,552	1,681
EEC	1,147	1,171	1,213	1,223	1,223	1,153	1,310
FRANCE	603	582	641	595	604	543	659
GERMANY	122	140	89	82	97	89	102
ITALY	305	332	348	431	409	401	438
NETHERLANDS	114	115	132	112	109	108	102
EFTA	121	153	98	138	150	176	125
EASTERN EUROPE	59	45	64	63	71	63	66
OTHER EUROPE	342	279	352	233	204	160	180
SPAIN	342	279	350	224	197	159	173
LATIN AMERICA	657	685	1,001	799	583	613	770
CACM	89	119	417	361	188	196	214
GUATEMALA	89	119	417	361	187	196	214
LAFTA	445	456	455	325	251	270	436
BRAZIL	360	384	383	234	166	188	342
PARAGUAY	54	53	57	77	64	68	80
OTHER LATIN AMERICA	123	110	129	113	144	147	120
JAMAICA	---	---	81	67	97	85	63
AFRICA	337	300	398	396	404	351	434
UNION S. AFRICA	23	28	61	49	89	55	68
MADAGASCAR	77	92	104	137	135	132	166
ASIA	1,383	1,368	1,532	1,993	2,103	1,622	1,369
CHINA MAINLAND	425	427	437	858	1,016	1,155	1,007
INDIA	365	424	367	372	487	101	112
CEYLON	147	126	201	186	108	104	75
CHINA FORMOSA	268	290	378	454	297	53	22
OCEANIA	10	20	19	23	13	13	13
OTHER	7	7	7	5	3	3	-3
OTHER AFRICA	2,337	2,173	1,595	3,985	3,783	4,490	6,635

TABLE 6--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

IMPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY ORIGIN, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 5995 STARCHES, ETC.							
WORLD	314,029	328,865	284,154	308,689	312,010	309,404	298,640
NORTH AMERICA	19,926	17,777	12,560	15,664	12,838	11,533	8,430
UNITED STATES	18,758	15,189	11,272	13,544	11,100	9,615	6,422
EUROPE	240,156	260,074	208,846	250,160	260,915	252,585	246,046
EEC	175,816	199,507	158,572	189,993	191,213	167,627	175,567
BELGIUM-LUXEMBOURG	8,086	9,092	5,017	5,628	5,900	5,531	6,146
FRANCE	33,223	34,467	25,649	39,290	30,001	35,252	24,374
GERMANY	62,381	76,926	48,695	39,812	38,328	34,391	44,094
ITALY	9,882	11,816	1,453	1,988	3,038	1,097	2,757
NETHERLANDS	62,244	67,206	77,758	103,275	113,946	91,356	98,196
EFTA	18,740	16,653	13,824	12,701	14,568	12,307	14,807
DENMARK	5,478	2,691	5,861	2,962	5,543	2,234	3,637
UNITED KINGDOM	5,083	5,936	3,946	4,998	4,817	4,813	5,037
EASTERN EUROPE	42,742	41,906	35,445	44,971	54,341	71,705	55,111
GERMANY EAST	881	648	5,001	7,411	7,830	22,457	11,138
POLAND	24,648	25,154	18,282	29,628	40,058	40,757	30,942
CZECHOSLOVAKIA	8,212	8,539	5,270	2,889	2,576	5,539	7,736
YUGOSLAVIA	8,228	7,111	6,791	4,838	835	102	69
OTHER EUROPE	2,858	2,008	1,005	2,495	793	946	561
LATIN AMERICA	5,459	4,842	5,154	2,658	5,898	6,920	4,823
CACM	---	---	---	---	---	---	2
LAFTA	4,938	4,251	4,818	2,168	5,579	6,441	4,495
OTHER LATIN AMERICA	521	591	336	490	319	479	326
AFRICA	2,337	2,173	1,595	3,985	3,783	4,490	6,635
UNION S. AFRICA	1,883	1,618	1,309	2,938	3,207	4,414	6,280
ASIA	34,384	33,328	44,480	21,984	15,697	22,467	22,242
CHINA MAINLAND	782	434	1,649	576	2,763	9,564	10,498
MALAYSIA INC. SINGAP	32,186	32,180	40,979	20,306	12,206	---	---
OCEANIA	11,768	10,677	11,508	14,237	12,879	11,420	10,470
AUSTRALIA	3,610	3,085	4,194	5,147	4,090	5,110	6,073
NEW ZEALAND	8,158	7,591	7,314	9,090	8,789	6,310	4,397
OTHER	-1	-6	11	1	---	-11	-6

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
TOTAL AGRICULTURE							
WORLD	1,699,401	1,774,578	2,016,043	2,168,369	2,304,347	2,437,446	2,427,176
NORTH AMERICA	162,645	171,013	192,261	200,353	226,472	285,520	275,793
UNITED STATES	132,646	142,422	163,047	168,664	190,041	240,026	231,788
CANADA	29,999	28,591	29,214	31,689	36,431	45,494	44,005
EUROPE	1,268,281	1,349,221	1,549,809	1,642,298	1,775,751	1,832,561	1,799,728
EEC	577,272	606,994	712,024	723,927	774,696	758,072	738,373
BELGIUM-LUXEMBOURG	26,428	29,895	31,461	46,064	51,986	50,174	63,883
FRANCE	59,431	52,617	84,568	84,974	79,516	103,342	95,123
GERMANY	359,367	354,711	339,297	317,001	375,545	338,565	284,814
ITALY	94,532	122,696	205,974	189,496	196,876	209,536	226,583
NETHERLANDS	37,514	47,075	50,724	86,392	70,773	56,455	67,970
EFTA	525,257	571,730	648,359	713,486	749,441	823,537	825,126
DENMARK	21,673	21,981	24,080	23,753	29,210	44,584	43,932
NORWAY	22,223	24,737	42,385	37,744	41,470	40,424	44,088
SWEDEN	59,910	61,575	71,610	91,588	93,901	101,611	113,459
SWITZERLAND	26,345	39,024	53,538	63,940	51,819	52,680	47,629
UNITED KINGDOM	380,107	407,623	439,842	476,734	507,638	553,236	542,134
EASTERN EUROPE	64,273	70,982	65,807	78,104	114,067	86,546	81,037
GERMANY EAST	16,129	30,897	21,249	25,484	26,639	26,748	26,495
OTHER EUROPE	101,479	99,515	123,619	126,781	137,547	164,406	155,192
IRELAND	60,772	55,397	68,206	70,225	66,100	62,794	69,237
SPAIN	7,918	15,287	19,059	12,045	24,939	44,257	36,057
FINLAND	18,627	14,723	18,413	20,874	25,334	32,839	22,774
LATIN AMERICA	58,289	61,579	56,486	56,397	59,579	61,078	61,499
CACM	2,116	2,248	2,957	2,780	2,621	3,050	2,878
LAFTA	31,113	34,335	26,953	24,630	25,261	24,425	25,731
OTHER LATIN AMERICA	25,060	24,996	26,576	28,987	31,697	33,603	32,890
AFRICA	88,370	81,284	89,381	92,795	100,974	103,474	108,344
ASIA	108,158	97,676	112,957	130,077	122,009	133,908	140,795
MALAYSIA INC. SINGAP	30,009	27,453	32,570	33,516	32,090	---	---
OCEANIA	12,915	12,990	14,220	16,451	18,784	20,103	21,705
OTHER	743	815	929	29,998	778	802	19,312

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 001- LIVE ANIMALS							
WORLD	181,233	155,956	188,187	207,769	234,855	154,709	153,917
NORTH AMERICA	1,505	2,277	2,159	2,544	2,510	3,907	2,180
UNITED STATES	1,360	1,581	1,807	2,082	2,305	3,667	2,077
EUROPE	174,731	150,167	181,764	200,758	227,449	144,332	145,951
EEC	127,151	106,486	129,591	144,964	177,549	105,354	99,404
BELGIUM-LUXEMBOURG	2,570	1,780	1,424	13,393	13,222	7,732	16,798
FRANCE	5,489	5,457	7,279	7,507	3,660	3,312	4,244
GERMANY	88,645	68,803	61,400	67,048	104,146	67,387	30,562
ITALY	22,054	23,624	51,937	34,480	37,576	22,266	39,075
NETHERLANDS	8,393	6,822	7,551	22,536	18,945	4,657	8,725
EFTA	2,279	2,832	4,981	5,555	7,902	5,341	2,648
SWITZERLAND	1,080	1,771	3,966	4,208	5,540	3,818	1,130
EASTERN EUROPE	3,882	5,017	3,582	5,502	4,771	3,031	3,535
OTHER EUROPE	41,419	35,832	43,610	44,737	37,227	30,606	40,364
IRELAND	40,709	34,660	42,861	43,513	35,709	27,802	37,170
LATIN AMERICA	1,584	1,140	437	1,112	924	1,442	1,285
CACM	---	---	---	---	---	---	---
LAFTA	1,365	942	333	918	787	1,214	1,164
OTHER LATIN AMERICA	219	198	104	194	137	228	121
AFRICA	1,130	335	1,219	863	1,113	985	1,547
ASIA	1,672	1,454	1,673	1,758	1,561	2,918	2,096
OCEANIA	599	578	921	728	1,277	1,118	858
OTHER	12	5	14	6	21	7	---

EXPORTS OF AGRICULTURAL COMMODITIES

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 011- MEAT (F, C, F)							
WORLD	118,803	149,726	201,380	221,481	220,489	249,529	246,189
NORTH AMERICA	280	360	1,552	217	1,735	5,542	1,417
EUROPE	111,550	140,995	186,857	210,634	203,114	227,027	219,131
EEC	65,668	74,786	131,984	133,187	121,991	146,227	134,077
BELGIUM-LUXEMBOURG	1,480	1,049	3,688	3,901	3,956	3,192	6,268
FRANCE	11,356	4,796	25,627	27,413	19,379	35,108	26,818
GERMANY	47,634	50,088	44,184	35,318	27,005	29,502	18,167
ITALY	4,772	18,060	57,566	62,108	67,068	73,794	78,985
NETHERLANDS	426	793	919	4,447	4,583	4,631	3,839
EFTA	29,152	33,328	35,350	53,278	50,043	55,395	61,316
AUSTRIA	666	984	974	1,610	3,085	5,500	4,020
NORWAY	721	778	1,070	2,665	1,843	4,482	4,302
SWEDEN	13,093	6,647	5,619	11,473	10,919	10,570	13,843
SWITZERLAND	4,695	13,228	17,043	21,591	14,862	19,441	16,187
UNITED KINGDOM	9,856	11,503	10,480	15,096	16,836	13,540	16,465
EASTERN EUROPE	9,673	25,439	13,160	21,792	21,747	10,148	15,483
USSR	13	1,251	11	11,633	5,636	19	11
GERMANY EAST	4,555	20,819	9,820	9,826	11,833	7,052	11,448
OTHER EUROPE	7,057	7,442	6,363	2,377	9,333	15,257	8,255
SPAIN	287	5,595	4,530	379	5,497	4,130	4,248
FINLAND	6,055	1,159	731	702	1,582	8,229	800
LATIN AMERICA	1,858	3,496	6,572	2,685	7,030	6,572	6,429
CACM	---	---	---	---	1	3	---
LAFTA	1,318	2,948	5,737	1,582	5,009	4,052	3,958
VENEZUELA	1,306	2,909	5,731	1,576	4,270	4,044	3,956
OTHER LATIN AMERICA	540	548	835	1,103	2,020	2,517	2,471
AFRICA	1,585	1,742	1,889	2,029	2,790	2,106	2,318
ASIA	3,412	3,006	4,328	5,722	5,605	8,079	12,873
OCEANIA	89	106	160	179	188	166	147
OTHER	29	21	22	15	27	37	3,874

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0111 MEAT OF BOVINE ANIMALS (F, C, F)							
WORLD	33,690	55,381	82,958	84,687	89,382	107,121	118,075
NORTH AMERICA	32	15	707	145	2	96	1,154
EUROPE	32,013	53,450	80,019	82,721	87,695	105,178	112,443
EEC	12,841	26,975	60,717	69,059	73,483	79,019	80,860
FRANCE	725	2,183	2,190	5,823	6,464	9,131	5,732
GERMANY	9,164	9,665	8,811	6,286	5,872	6,254	5,112
ITALY	2,927	14,924	49,523	55,370	59,867	60,101	64,429
NETHERLANDS	22	174	146	795	749	3,306	2,450
EFTA	12,360	8,465	6,781	10,958	9,579	11,531	16,098
NORWAY	479	399	350	625	621	1,779	1,560
SWEDEN	9,509	3,604	1,937	3,397	1,979	1,779	3,425
SWITZERLAND	1,118	1,873	1,392	5,136	6,444	6,004	6,664
UNITED KINGDOM	1,241	2,510	3,080	1,596	489	1,207	1,414
EASTERN EUROPE	1,492	11,634	7,770	2,412	3,373	6,924	11,481
GERMANY EAST	491	9,970	5,565	2,121	2,915	6,424	11,161
OTHER EUROPE	5,320	6,376	4,751	292	1,260	7,704	4,004
SPAIN	208	5,507	4,368	51	56	120	2,731
FINLAND	4,847	677	2	1	833	6,840	230
LATIN AMERICA	127	151	202	107	80	131	159
CACM	---	---	---	---	---	---	---
LAFTA	3	7	---	2	5	---	1
OTHER LATIN AMERICA	124	144	202	105	75	131	158
AFRICA	712	801	992	926	724	749	705
ASIA	798	958	1,036	781	874	955	842
OCEANIA	3	---	---	2	---	5	1
OTHER	5	6	2	5	7	7	2,771

EXPORTS OF AGRICULTURAL COMMODITIES

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0113 MEAT OF SWINE (F, C, F)							
WORLD	31,637	35,827	56,072	70,626	70,584	77,935	62,664
NORTH AMERICA	54	30	725	44	1,671	5,420	222
CANADA	---	---	669	12	1,397	4,784	222
EUROPE	28,903	31,924	48,473	67,135	60,696	65,114	52,721
EEC	12,471	5,989	29,163	28,447	22,893	36,704	27,252
BELGIUM-LUXEMBOURG	712	194	2,693	1,845	2,272	1,709	1,591
FRANCE	9,038	631	18,561	15,533	8,567	18,014	11,699
GERMANY	1,745	2,667	1,084	2,478	3,435	4,294	636
ITALY	953	2,429	6,719	5,899	5,946	12,492	13,235
NETHERLANDS	23	68	106	2,692	2,673	195	91
EFTA	7,123	11,633	12,992	20,661	14,299	22,131	20,454
AUSTRIA	52	67	125	561	1,084	2,630	1,064
NORWAY	92	190	500	1,793	1,011	2,369	2,458
PORTUGAL	---	1	---	493	2,142	793	3,213
SWEDEN	2,128	1,880	2,795	6,453	7,048	7,221	8,252
SWITZERLAND	1,542	6,833	8,843	10,562	2,165	8,025	4,595
UNITED KINGDOM	3,297	2,654	729	785	846	1,087	872
EASTERN EUROPE	8,042	13,738	5,343	17,075	18,369	3,205	3,998
USSR	4	5	1	9,329	5,623	3	1
GERMANY EAST	3,948	10,787	4,209	7,705	8,918	628	287
CZECHOSLOVAKIA	4,085	2,925	1,127	---	18	1,346	---
HUNGARY	5	20	5	40	3,191	578	1,857
OTHER EUROPE	1,267	564	975	952	5,135	3,074	1,017
SPAIN	26	18	31	11	4,010	1,906	125
FINLAND	1,147	474	729	694	734	908	529
LATIN AMERICA	1,464	3,008	6,109	2,294	6,439	5,844	5,756
CACM	---	---	---	---	---	---	---
LAFTA	1,292	2,884	5,726	1,576	4,939	4,031	3,956
VENEZUELA	1,292	2,884	5,726	1,576	4,253	4,031	3,956
OTHER LATIN AMERICA	172	124	383	718	1,500	1,813	1,800
AFRICA	154	204	220	334	617	464	357
ASIA	1,050	656	516	813	1,155	1,081	2,807
OCEANIA	10	8	24	3	---	8	5
OTHER	2	-3	5	3	6	4	796

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0114 POULTRY (F, C, F)							
WORLD	34,962	37,070	34,552	36,541	30,462	28,233	26,136
NORTH AMERICA	99	11	11	4	14	10	12
EUROPE	33,407	35,544	32,602	33,373	25,671	22,829	18,514
EEC	29,352	28,785	25,292	18,556	8,524	7,320	3,165
GERMANY	28,575	28,161	24,857	18,331	7,977	6,773	2,639
EFTA	3,782	6,440	6,758	11,461	14,333	11,551	12,318
AUSTRIA	596	914	825	928	1,943	2,772	2,779
SWEDEN	421	97	27	553	642	261	285
SWITZERLAND	870	2,908	4,629	3,395	3,868	3,168	2,573
UNITED KINGDOM	1,828	2,471	1,218	6,451	7,771	5,222	6,512
EASTERN EUROPE	2	2	1	2,292	3	4	2
USSR	1	---	1	2,292	2	4	2
OTHER EUROPE	271	317	551	1,064	2,811	3,954	3,029
GREECE	6	6	151	387	1,065	1,466	1,460
SPAIN	44	56	98	298	1,412	2,068	1,307
LATIN AMERICA	15	40	29	10	110	45	89
CACM	---	---	---	---	---	---	---
LAFTA	11	30	6	4	48	8	1
OTHER LATIN AMERICA	4	10	23	6	62	37	88
AFRICA	356	397	382	573	1,233	724	927
ASIA	1,022	973	1,391	2,413	3,251	4,480	6,217
JAPAN	1	---	43	279	442	488	1,295
SAUDI ARABIA	26	32	84	173	484	862	809
KUWAIT	192	165	198	434	493	698	1,196
BAHRAIN	67	79	181	389	564	547	819
OCEANIA	54	95	126	167	180	140	135
OTHER	9	10	11	1	3	5	242

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 012- MEAT DRIED, SALTED, ETC.							
WORLD	197,167	207,753	216,803	241,416	239,444	278,920	263,792
NORTH AMERICA	1,861	1,104	42	36	213	13	57
EUROPE	190,830	202,408	213,430	236,811	235,489	274,660	258,664
EEC	961	1,223	1,788	2,742	2,115	2,507	1,536
EFTA	189,559	200,795	211,242	233,501	232,932	271,567	256,619
UNITED KINGDOM	188,732	199,812	209,793	231,674	230,352	269,156	253,776
EASTERN EUROPE	6	3	4	7	17	26	19
OTHER EUROPE	304	387	396	561	425	560	490
LATIN AMERICA	1,654	1,818	1,092	1,997	1,257	1,456	825
CACM	5	2	3	1	1	1	---
LAFTA	882	1,046	288	1,196	398	507	14
OTHER LATIN AMERICA	767	770	801	800	858	948	811
AFRICA	1,523	1,300	1,076	991	891	1,041	1,512
ASIA	1,258	1,100	1,122	1,415	1,295	1,525	1,635
OCEANIA	34	18	32	160	286	219	366
OTHER	7	5	9	6	13	6	733

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 013- MEAT CANNED, ETC.							
WORLD	89,993	93,208	109,185	115,782	141,108	167,666	158,879
NORTH AMERICA	36,589	43,129	51,227	49,121	68,587	87,780	77,946
UNITED STATES	35,682	42,708	50,692	48,523	66,761	84,781	73,943
CANADA	907	421	535	598	1,826	2,999	4,003
EUROPE	40,303	38,250	43,580	44,319	54,187	59,978	58,704
EEC	5,521	5,584	8,319	7,519	10,443	12,499	9,892
GERMANY	3,524	3,691	5,502	4,881	6,810	7,194	5,536
ITALY	644	483	1,380	1,097	1,336	2,000	1,874
EFTA	32,881	30,321	31,674	33,500	38,058	41,372	43,210
SWEDEN	1,159	680	1,690	2,188	2,898	2,876	3,147
UNITED KINGDOM	30,773	28,814	29,263	30,854	34,387	37,271	39,126
EASTERN EUROPE	169	302	331	8	1,232	1,200	805
OTHER EUROPE	1,732	2,043	3,256	3,292	4,454	4,907	4,797
SPAIN	438	821	1,616	1,380	2,193	2,646	2,438
LATIN AMERICA	3,485	2,854	3,345	4,670	4,720	5,649	6,078
CACM	53	37	33	34	61	45	51
LAFTA	1,144	393	314	268	438	696	891
OTHER LATIN AMERICA	2,288	2,424	2,998	4,368	4,221	4,908	5,136
BR. TERR. AM. NES	1,292	1,298	874	1,041	1,234	1,610	1,742
AFRICA	2,480	1,982	2,519	2,479	2,605	2,395	2,792
ASIA	6,683	6,682	7,738	8,518	8,698	9,293	9,160
MALAYSIA INC. SINGAP	3,656	3,826	4,390	4,218	4,310	---	---
HONG KONG	732	821	918	1,492	1,227	1,575	2,363
OCEANIA	433	285	740	1,839	2,298	2,563	3,685
U.S. DEP. OCEANIA	212	49	383	1,446	1,945	2,304	3,405
OTHER	20	26	36	4,836	13	8	514

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 022- MILK AND CREAM							
WORLD	69,442	71,142	75,435	78,805	86,885	86,472	89,961
NORTH AMERICA	276	218	197	274	375	504	556
EUROPE	24,934	28,302	30,534	32,503	35,338	33,614	27,690
EEC	15,358	15,510	14,994	14,567	15,660	15,923	9,843
FRANCE	3,271	3,196	3,387	4,014	2,752	2,551	2,009
GERMANY	10,519	10,812	9,742	8,887	8,696	7,370	3,581
ITALY	894	1,135	964	1,044	1,253	1,531	1,763
NETHERLANDS	648	227	663	598	2,449	4,389	2,448
EFTA	8,488	10,702	11,918	13,571	14,192	14,752	14,868
SWITZERLAND	740	1,939	1,221	1,135	1,598	1,539	1,913
UNITED KINGDOM	7,298	8,419	10,124	12,187	11,892	11,127	11,032
EASTERN EUROPE	273	357	958	2,487	2,747	794	466
OTHER EUROPE	815	1,733	2,664	1,878	2,739	2,145	2,513
BRIT. AOC	528	700	994	1,207	1,096	752	1,088
LATIN AMERICA	11,378	13,156	10,836	11,328	12,007	9,487	9,935
CACM	1,267	1,345	1,925	1,845	1,658	1,960	1,838
LAFTA	7,075	8,864	5,298	5,806	6,387	3,502	3,790
VENEZUELA	6,124	4,964	4,684	5,421	5,217	1,998	2,592
OTHER LATIN AMERICA	3,036	2,947	3,613	3,677	3,962	4,025	4,307
BR. TERR. AM. NES	2,635	2,408	1,193	1,263	1,411	1,458	1,482
AFRICA	7,016	5,717	7,010	7,677	10,736	11,178	11,933
GHANA	395	408	487	792	1,982	2,433	2,420
NIGERIA	736	952	1,045	1,471	1,793	1,683	1,604
ANGOLA	1,633	1,241	1,886	1,516	2,009	2,324	2,381
ASIA	25,792	23,659	26,790	26,922	28,352	31,567	34,801
INDIA	665	751	122	320	406	3,057	3,047
CEYLON	1,586	1,509	3,894	3,311	1,651	2,997	2,857
THAILAND	3,265	3,661	3,642	3,542	4,127	3,698	4,132
MALAYSIA INC. SINGAP	11,527	8,939	10,337	9,749	10,142	---	---
MALAYSIA	---	---	---	---	---	6,491	4,620
INDONESIA	2,836	1,352	961	700	202	538	741
PHILIPPINES	1,369	2,484	2,001	2,685	2,419	3,347	3,977
LEBANON	442	489	621	753	1,253	1,309	1,798
OCEANIA	28	78	56	85	58	99	112
OTHER	18	12	12	16	19	23	4,934

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 023- BUTTER							
WORLD	107,231	116,580	117,955	126,324	128,680	120,467	114,748
NORTH AMERICA	119	263	93	148	356	123	204
EUROPE	99,801	111,904	113,921	122,879	123,430	116,378	109,764
EEC	15,483	20,490	13,222	5,751	6,873	6,452	4,125
GERMANY	14,107	16,164	8,989	4,112	4,119	4,429	1,855
ITALY	1,227	4,161	2,298	1,287	2,148	1,015	913
EFTA	79,850	89,938	99,582	110,902	112,560	109,757	104,041
SWITZERLAND	3,483	1,778	1,443	7,595	3,709	2,746	202
UNITED KINGDOM	75,501	87,311	97,613	102,769	107,666	106,660	103,819
EASTERN EUROPE	4,361	1,336	1,022	6,113	3,873	44	1,463
OTHER EUROPE	107	140	95	113	124	125	135
LATIN AMERICA	2,182	1,310	1,289	1,154	1,098	1,067	1,034
CACM	5	2	3	3	3	3	1
LAFTA	1,079	339	251	105	180	166	145
OTHER LATIN AMERICA	1,098	969	1,035	1,046	915	898	888
AFRICA	3,127	1,749	1,305	764	1,712	644	521
ASIA	1,997	1,341	1,335	1,370	2,080	2,249	1,902
OCEANIA	---	---	---	---	---	---	2
OTHER	5	13	12	9	4	6	1,321

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 024- CHEESE AND CURD							
WORLD	99,887	102,298	112,452	118,885	125,483	138,267	145,033
NORTH AMERICA	14,813	14,324	14,838	15,412	17,095	23,074	25,365
UNITED STATES	11,952	11,741	12,177	12,630	13,598	19,293	20,864
CANADA	2,861	2,583	2,661	2,782	3,497	3,781	4,501
EUROPE	77,687	81,816	90,868	95,410	99,975	104,936	108,667
EEC	60,115	62,860	71,068	73,044	76,276	82,695	84,991
BELGIUM-LUXEMBOURG	4,060	4,027	4,332	4,889	5,367	5,999	6,310
FRANCE	6,998	7,297	8,512	8,869	11,543	12,645	13,567
GERMANY	27,017	28,301	31,060	33,072	31,073	34,350	34,568
ITALY	21,711	22,863	26,709	25,651	27,738	29,070	29,665
EFTA	14,611	14,587	16,525	18,028	18,831	19,041	19,703
SWEDEN	2,759	3,036	3,607	3,975	4,291	4,500	4,564
UNITED KINGDOM	10,089	9,613	10,502	11,102	11,456	11,789	12,502
EASTERN EUROPE	2,335	3,628	2,343	3,397	3,100	1,252	2,599
GERMANY EAST	2,267	1,464	1,195	1,436	1,176	953	963
OTHER EUROPE	626	741	932	941	1,768	1,948	1,374
LATIN AMERICA	3,082	1,945	1,629	1,716	927	953	1,117
CACM	27	30	39	34	30	29	40
LAFTA	2,841	1,677	1,328	1,081	351	339	400
OTHER LATIN AMERICA	214	238	262	601	546	585	677
AFRICA	2,401	1,739	2,149	2,575	2,866	2,835	2,609
ASIA	1,264	1,619	2,065	2,757	3,340	5,027	5,525
JAPAN	155	652	997	1,242	1,898	3,751	4,267
OCEANIA	635	840	897	1,005	1,265	1,437	1,443
OTHER	5	15	6	10	15	5	307

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 025- EGGS							
WORLD	43,554	31,229	32,124	22,336	19,991	22,296	20,280
NORTH AMERICA	2	9	16	235	156	3,201	1,140
UNITED STATES	---	9	3	134	15	2,090	336
CANADA	2	---	13	101	141	1,111	804
EUROPE	42,591	30,668	31,633	20,688	18,837	18,498	11,878
EEC	34,903	24,521	22,549	14,934	12,968	12,486	5,370
FRANCE	596	351	383	313	431	501	171
GERMANY	33,514	23,483	20,906	13,081	10,847	9,956	3,098
ITALY	782	666	1,242	1,489	1,100	1,056	914
NETHERLANDS	---	4	1	45	569	803	1,131
EFTA	7,562	5,882	8,437	4,854	5,472	5,463	5,717
AUSTRIA	281	235	490	545	620	409	413
DENMARK	1	---	206	29	512	767	675
NORWAY	717	566	952	542	516	201	220
SWITZERLAND	2,033	1,615	1,856	1,379	1,527	1,583	1,234
UNITED KINGDOM	3,927	2,930	4,854	2,214	2,180	2,356	2,927
EASTERN EUROPE	2	197	427	729	4	201	544
OTHER EUROPE	124	68	220	171	393	348	247
LATIN AMERICA	331	3	12	754	680	41	119
CACM	---	---	---	---	---	---	---
LAFTA	327	2	---	732	654	21	80
OTHER LATIN AMERICA	4	1	12	22	26	20	39
AFRICA	298	146	67	47	117	156	311
ASIA	322	387	385	599	185	374	1,345
OCEANIA	---	1	---	---	---	18	8
OTHER	10	15	11	13	16	8	5,479

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 041- WHEAT, UNMILLED							
WORLD	18,802	14,616	27,336	13,258	24,526	13,482	16,949
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	18,802	14,615	27,219	12,949	24,318	13,481	16,086
EEC	10,748	6,757	13,752	6,841	4,661	1,964	6,626
FRANCE	2,589	---	3,519	1	---	27	3
GERMANY	7,809	6,693	7,914	6,375	4,373	1,790	5,848
NETHERLANDS	341	62	2,236	453	273	91	763
EFTA	2,639	3,231	5,031	2,202	6,485	7,974	8,358
DENMARK	886	448	487	80	209	60	1,263
NORWAY	794	435	644	1,963	4,597	3,711	4,447
SWITZERLAND	425	2,324	226	149	2	300	1,179
UNITED KINGDOM	19	18	3,272	5	1,675	3,878	1,469
EASTERN EUROPE	4,662	4,373	6,587	3,696	12,524	3,217	659
GERMANY EAST	---	---	17	---	---	1,909	331
POLAND	1,941	1,073	6,240	3,107	11,309	1,306	1
CZECHOSLOVAKIA	145	181	---	---	1,204	1	---
HUNGARY	---	1,125	330	582	---	---	327
YUGOSLAVIA	2,576	1,245	---	---	---	---	---
OTHER EUROPE	753	254	1,849	210	648	326	443
IRELAND	3	7	433	122	219	249	400
FINLAND	12	244	1,407	39	409	19	9
LATIN AMERICA	---	---	---	1	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	1	---	---	---
AFRICA	---	---	116	1	139	---	839
ASIA	---	---	---	301	67	1	24
OCEANIA	---	---	---	---	---	---	---
OTHER	---	1	1	6	2	---	---

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
	1,000 DOLLARS						
SITC 042- RICE							
WORLD	36	46	74	183	409	207	232
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	30	39	67	106	81	201	224
EEC	17	17	27	38	23	98	81
BELGIUM-LUXEMBOURG	10	---	---	---	---	48	---
FRANCE	5	8	11	9	10	19	26
GERMANY	2	9	16	13	13	18	45
ITALY	---	---	---	16	---	11	8
EFTA	10	21	35	66	51	61	130
AUSTRIA	1	14	30	63	46	52	105
NORWAY	3	2	3	2	1	2	4
SWEDEN	6	5	2	---	---	6	1
SWITZERLAND	---	---	---	---	---	---	19
EASTERN EUROPE	---	---	---	---	---	---	6
GERMANY EAST	---	---	---	---	---	39	---
OTHER EUROPE	3	1	5	2	7	33	7
FINLAND	3	1	5	2	6	3	5
LATIN AMERICA	---	---	---	---	---	2	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	3	3	4	76	325	---	---
ANGOLA	3	3	4	76	325	---	---
ASIA	1	1	2	1	1	---	2
OCEANIA	---	---	---	---	---	---	---
OTHER	2	3	1	---	---	6	---
				---	2		6

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 043- BARLEY, UNMILLED							
WORLD	18,066	35,782	20,814	21,058	41,730	84,498	83,881
NORTH AMERICA	240	168	67	122	64	---	---
EUROPE	16,817	33,828	19,034	19,264	40,626	81,534	82,419
EEC	11,468	26,590	11,528	15,311	31,961	38,718	45,052
BELGIUM-LUXEMBOURG	1,832	3,951	524	301	2,978	5,684	5,743
GERMANY	6,867	16,199	7,762	13,077	24,412	21,792	28,472
ITALY	325	657	811	565	1,437	7,354	6,655
NETHERLANDS	2,417	5,699	2,360	1,319	3,093	3,771	3,971
EFTA	4,631	4,710	5,352	3,420	3,797	15,681	13,921
DENMARK	3,240	2,955	2,914	1,689	1,811	13,055	11,206
NORWAY	936	904	1,627	969	726	1,455	2,068
EASTERN EUROPE	75	1,629	656	116	3,219	5,590	10,216
GERMANY EAST	---	489	---	---	---	4,104	5,099
POLAND	74	1,140	625	40	42	1,455	3,710
CZECHOSLOVAKIA	---	---	29	---	3,107	28	1,399
OTHER EUROPE	643	899	1,498	417	1,649	21,545	13,230
SPAIN	64	9	505	---	303	19,241	11,859
FINLAND	69	348	588	367	822	675	629
LATIN AMERICA	931	1,260	1,262	867	457	753	710
CACM	---	---	---	---	---	---	---
LAFTA	930	1,260	1,261	866	457	753	710
BRAZIL	655	967	765	866	457	752	318
OTHER LATIN AMERICA	1	---	1	1	---	---	---
AFRICA	54	520	444	802	579	1,991	8
ASIA	21	1	4	---	---	217	743
OCEANIA	---	---	---	---	---	---	---
OTHER	3	5	3	3	4	3	1

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 044- MAIZE (CORN), UNMILLED							
WORLD	407	330	402	348	412	204	469
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	407	327	399	348	411	204	466
EEC	260	285	304	332	367	158	362
GERMANY	247	260	297	332	298	153	361
ITALY	8	12	7	---	---	5	1
NETHERLANDS	---	13	---	---	69	---	---
EFTA	57	22	95	10	43	34	73
DENMARK	1	---	---	---	10	12	36
SWEDEN	8	22	95	8	33	22	28
UNITED KINGDOM	43	---	---	---	---	---	---
EASTERN EUROPE	88	20	---	5	---	10	25
CZECHOSLOVAKIA	67	20	---	---	---	---	---
HUNGARY	7	---	---	5	---	7	17
OTHER EUROPE	2	---	---	1	1	2	6
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	3	3	---	1	---	3

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 045- CEREALS, UNMILLED, NES							
WORLD	14,461	16,007	13,189	5,603	9,503	11,799	10,219
NORTH AMERICA	4	3	1	---	---	---	---
EUROPE	14,315	15,935	13,141	5,541	9,459	11,772	10,186
EEC	8,626	11,402	7,675	2,570	4,213	6,929	8,199
BELGIUM-LUXEMBOURG	444	1,262	209	4	35	164	6
FRANCE	911	1,599	210	6	217	71	14
GERMANY	3,060	3,677	1,242	1,935	3,170	5,568	7,408
ITALY	57	535	82	65	48	168	329
NETHERLANDS	4,154	4,329	5,932	560	743	958	442
EFTA	1,417	1,963	1,776	717	2,463	2,712	1,395
DENMARK	909	1,196	785	178	939	1,331	215
NORWAY	176	98	534	218	1,054	438	700
SWITZERLAND	201	293	429	281	333	334	375
EASTERN EUROPE	2,617	987	935	549	643	960	---
POLAND	2,613	987	745	519	511	215	---
OTHER EUROPE	1,655	1,583	2,755	1,705	2,140	1,171	592
IRELAND	1,636	1,424	1,091	714	984	1,071	472
FINLAND	2	153	1,650	974	1,132	43	40
LATIN AMERICA	120	33	19	24	21	7	4
CACM	---	---	---	---	---	---	---
LAFTA	85	3	1	3	4	6	2
OTHER LATIN AMERICA	35	30	18	21	17	1	2
AFRICA	20	29	18	28	18	16	23
ASIA	---	---	3	4	---	---	---
OCEANIA	---	1	2	4	5	---	---
OTHER	2	6	5	2	---	4	6

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0451 RYE, UNMILLED							
WORLD	4,231	7,721	7,629	208	609	905	182
NORTH AMERICA	4	---	1	---	---	---	---
EUROPE	4,226	7,717	7,605	206	608	907	179
EEC	1,502	5,814	5,657	132	544	724	96
BELGIUM-LUXEMBOURG	---	1,257	179	---	---	99	---
GERMANY	272	355	54	---	---	136	94
ITALY	5	501	14	8	2	4	2
NETHERLANDS	1,225	3,626	5,278	124	542	485	---
EFTA	111	906	403	72	60	153	80
DENMARK	51	520	339	65	53	---	37
PORTUGAL	---	325	---	---	---	---	---
EASTERN EUROPE	2,613	987	549	---	---	29	---
POLAND	2,613	987	360	---	---	---	---
OTHER EUROPE	---	10	996	2	4	1	3
IRELAND	---	10	691	---	---	1	1
FINLAND	---	---	302	1	4	---	1
LATIN AMERICA	---	---	8	---	---	---	1
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	1
OTHER LATIN AMERICA	---	---	8	---	---	---	---
AFRICA	---	2	6	1	---	---	---
ASIA	---	---	3	---	---	---	---
OCEANIA	---	---	2	---	---	---	---
OTHER	1	2	4	1	1	-2	2

TABLE 7 - CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0452 OATS, UNMILLED							
WORLD	8,027	7,457	5,498	4,992	8,689	10,720	9,077
NORTH AMERICA	---	2	---	---	---	---	---
EUROPE	7,910	7,421	5,488	4,981	8,685	10,716	9,077
EEC	5,396	5,347	2,018	2,344	3,663	6,132	7,232
FRANCE	20	1,522	78	5	217	71	11
GERMANY	2,376	3,084	1,188	1,931	3,170	5,430	6,849
NETHERLANDS	2,891	702	654	347	195	402	312
EFTA	1,207	903	1,330	602	2,352	2,503	1,280
DENMARK	787	556	446	112	886	1,331	178
NORWAY	137	22	483	178	1,006	387	638
SWITZERLAND	154	281	380	279	332	324	371
EASTERN EUROPE	3	---	386	549	643	931	---
POLAND	---	---	385	519	511	215	---
OTHER EUROPE	1,304	1,171	1,754	1,486	2,027	1,150	565
IRELAND	1,290	1,166	400	509	930	1,061	454
FINLAND	---	---	1,346	966	1,084	38	38
LATIN AMERICA	117	30	10	12	5	---	---
CACM	---	---	---	---	---	---	---
LAFTA	83	---	---	---	---	---	---
OTHER LATIN AMERICA	34	30	10	12	5	---	---
AFRICA	1	2	---	---	1	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	-1	2	---	-1	-2	4	---

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 046- MEAL AND FLOUR OF WHEAT							
WORLD	936	1,091	1,092	1,585	1,292	2,178	2,398
NORTH AMERICA	1	4	11	1	1	---	---
EUROPE	542	626	589	1,041	686	1,608	838
EEC	191	203	167	155	165	214	217
FRANCE	31	18	9	9	8	42	28
GERMANY	86	129	108	107	110	129	144
NETHERLANDS	55	44	41	30	35	27	36
EFTA	181	313	276	319	318	275	292
DENMARK	148	170	236	231	247	242	228
NORWAY	22	112	25	22	6	18	46
SWEDEN	9	9	10	64	64	14	12
EASTERN EUROPE	---	1	---	382	---	904	3
USSR	---	1	---	382	---	6	3
GERMANY EAST	---	---	---	---	---	153	---
POLAND	---	---	---	---	---	745	---
OTHER EUROPE	170	109	146	185	203	215	326
IRELAND	71	39	69	30	18	31	95
BRIT. AOC	77	47	51	129	152	162	197
LATIN AMERICA	8	7	15	60	38	48	46
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	8	7	15	60	4	48	46
TRINIDAD TOBAGO	---	---	1	52	34	45	40
AFRICA	151	192	160	228	27	305	278
UNION S. AFRICA	---	---	2	35	291	60	62
EGYPT	1	---	---	1	41	80	35
GHANA	16	22	18	41	1	57	54
NIGERIA	68	107	33	27	104	17	17
BR. AOC AFR. NES	40	35	56	57	43	25	45
ASIA	223	257	312	247	53	214	1,231
CEYLON	6	3	7	16	270	20	37
MALAYSIA INC. SINGAP	50	52	87	70	17	---	---
INDONESIA	---	---	5	11	86	---	449
CYPRUS	54	75	65	45	---	55	61
SYRIA	---	---	---	---	65	---	185
JORDAN	1	1	10	1	---	---	188
IRAQ	2	---	1	2	---	---	182
FED. SOUTH ARABIA	30	59	62	38	39	32	8
KUWAIT	27	26	27	21	12	3	1
BAHRAIN	31	22	22	19	21	25	25
OCEANIA	1	1	---	3	---	---	---
OTHER	10	4	5	5	6	3	5

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 051- FRUIT AND NUTS, FRESH, DRIED							
WORLD	13,120	13,196	11,707	11,582	14,427	16,568	15,773
NORTH AMERICA	81	53	207	351	862	1,105	312
UNITED STATES	49	41	140	314	851	1,050	293
EUROPE	12,375	12,302	10,344	9,792	12,367	13,784	13,717
EEC	6,855	5,892	3,806	2,655	2,888	2,978	3,394
BELGIUM-LUXEMBOURG	607	956	848	398	460	372	580
FRANCE	1,130	938	534	384	306	362	576
GERMANY	4,938	3,770	2,234	1,766	1,473	1,701	1,720
NETHERLANDS	130	164	130	47	561	396	329
EFTA	3,326	4,480	4,098	4,153	5,748	6,258	6,872
AUSTRIA	164	346	399	331	362	328	322
DENMARK	174	301	285	362	495	474	894
NORWAY	405	501	469	596	704	1,530	1,491
SWEDEN	635	1,053	782	499	402	772	2,073
UNITED KINGDOM	1,845	2,144	2,067	2,275	3,690	2,984	1,929
EASTERN EUROPE	590	930	880	799	1,207	1,210	967
GERMANY EAST	587	922	873	797	1,080	986	836
OTHER EUROPE	1,604	1,000	1,560	2,185	2,524	3,338	2,484
IRELAND	779	520	928	1,387	1,682	2,222	1,694
FINLAND	712	423	525	724	689	956	567
LATIN AMERICA	168	390	268	485	283	646	824
CACM	---	---	---	---	---	---	---
LAFTA	120	385	255	419	257	635	809
BRAZIL	108	374	245	392	253	624	780
OTHER LATIN AMERICA	48	5	13	66	26	11	15
AFRICA	368	354	676	765	723	788	776
ANGOLA	120	182	333	448	491	459	493
ASIA	50	28	90	85	120	154	69
OCEANIA	46	48	106	83	53	73	56
OTHER	32	21	16	21	19	18	19

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
	1,000 DOLLARS						
SITC 0511 ORANGES, ETC.							
WORLD	1,130	988	1,590	472	405	695	587
NORTH AMERICA	8	4	74	---	---	---	---
EUROPE	1,053	938	1,321	466	402	691	580
EEC	122	64	133	142	56	102	105
FRANCE	10	13	17	9	9	9	12
GERMANY	84	18	62	122	38	49	93
NETHERLANDS	26	21	34	11	9	23	---
EFTA	195	299	243	194	242	382	367
AUSTRIA	11	8	14	13	10	15	14
DENMARK	9	28	19	12	88	68	63
NORWAY	96	105	105	100	116	59	169
SWEDEN	78	80	104	48	26	182	120
SWITZERLAND	1	62	1	1	2	2	1
UNITED KINGDOM	---	16	---	20	---	56	---
EASTERN EUROPE	2	8	6	1	10	47	35
POLAND	2	7	6	1	10	46	34
OTHER EUROPE	734	567	939	129	94	160	73
IRELAND	520	421	838	---	---	---	---
FINLAND	197	137	80	127	86	160	73
LATIN AMERICA	19	6	15	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	1	2	---	---	---	---
OTHER LATIN AMERICA	19	5	13	---	---	---	---
AFRICA	33	25	121	3	2	2	2
UNION S. AFRICA	---	---	62	---	---	---	---
ASIA	2	3	16	---	---	---	---
OCEANIA	5	2	40	---	---	---	---
OTHER	10	10	3	3	1	2	5

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0512 OTHER CITRUS FRUIT							
WORLD	110	78	112	132	116	140	189
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	111	77	109	132	115	139	184
EEC	74	48	30	35	9	15	30
GERMANY	68	44	20	29	4	12	29
NETHERLANDS	5	---	8	5	4	2	---
EFTA	21	16	55	66	76	61	107
AUSTRIA	1	1	7	1	3	2	2
DENMARK	2	2	3	10	17	23	6
NORWAY	5	6	21	15	27	8	27
SWEDEN	9	5	17	28	28	28	72
SWITZERLAND	---	---	1	7	1	---	---
UNITED KINGDOM	4	2	6	5	---	---	---
EASTERN EUROPE	1	---	1	1	6	22	20
POLAND	1	---	1	1	6	19	13
OTHER EUROPE	15	13	23	30	24	41	27
FINLAND	15	13	23	30	24	41	27
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	-1	1	3	---	1	1	5

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0514 APPLES, FRESH							
WORLD	6,143	4,346	2,473	2,399	2,307	2,524	2,607
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	6,072	4,311	2,415	2,315	2,198	2,420	2,526
EEC	4,109	2,182	783	569	201	480	327
FRANCE	761	310	83	168	71	9	98
GERMANY	3,294	1,832	680	401	125	466	221
EFTA	835	1,036	468	561	486	500	986
AUSTRIA	74	220	132	80	94	52	52
DENMARK	18	30	57	110	127	36	278
NORWAY	103	44	22	158	112	109	254
SWEDEN	184	344	169	177	142	267	299
UNITED KINGDOM	435	379	87	35	10	31	102
EASTERN EUROPE	587	922	873	797	1,118	1,086	907
GERMANY EAST	587	922	873	797	1,015	985	836
YUGOSLAVIA	---	---	---	---	77	85	71
OTHER EUROPE	541	171	291	388	393	354	306
FINLAND	420	162	272	378	391	328	286
LATIN AMERICA	1	---	---	---	---	---	2
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	2
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	1	32	53	83	108	103	77
ANGOLA	70	16	41	72	93	96	68
ASIA	15	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	3	5	1	1	1	2

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0515 GRAPES, FRESH							
WORLD	306	565	343	490	316	579	600
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	278	527	268	401	216	493	439
EEC	125	250	35	35	8	27	35
FRANCE	6	24	1	3	---	---	1
GERMANY	111	211	34	32	7	27	34
EFTA	120	218	170	245	163	339	352
AUSTRIA	15	24	---	1	2	3	1
DENMARK	9	44	37	57	51	164	123
NORWAY	27	43	59	85	47	145	170
SWEDEN	42	55	34	25	12	7	51
UNITED KINGDOM	27	52	40	77	51	20	6
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	33	59	63	121	45	127	52
ICELAND	3	2	3	15	15	7	7
FINLAND	30	57	59	106	30	119	44
LATIN AMERICA	---	1	---	---	4	13	83
CACM	---	---	---	---	---	---	---
LAFTA	---	1	---	---	4	13	83
BRAZIL	---	1	---	---	4	13	83
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	22	36	75	90	96	71	79
ANGOLA	15	29	56	74	78	53	59
MOZAMBIQUE	2	4	12	15	18	18	20
ASIA	2	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	4	1	---	-1	---	2	-1

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 052- DRIED FRUIT							
WORLD	4,010	2,927	954	1,408	1,262	1,288	999
NORTH AMERICA	598	365	467	926	762	705	478
UNITED STATES	425	239	419	884	715	647	442
CANADA	173	126	48	42	47	58	36
EUROPE	1,716	1,494	329	287	289	328	251
EEC	780	505	209	170	142	141	132
BELGIUM-LUXEMBOURG	56	55	63	47	14	11	5
FRANCE	66	41	7	13	13	5	4
GERMANY	453	276	77	58	74	96	106
NETHERLANDS	138	117	62	52	40	26	15
EFTA	715	819	91	96	120	132	86
AUSTRIA	10	64	4	19	55	66	8
NORWAY	230	217	36	21	18	16	14
SWEDEN	382	452	20	21	18	17	18
UNITED KINGDOM	27	28	23	18	12	22	18
EASTERN EUROPE	3	4	---	3	---	9	8
OTHER EUROPE	218	166	29	18	27	46	25
IRELAND	104	86	4	3	12	25	2
LATIN AMERICA	339	371	15	26	19	40	57
CACM	8	3	---	---	---	---	---
LAFTA	51	94	15	21	16	36	54
BRAZIL	22	61	14	21	15	34	50
OTHER LATIN AMERICA	280	274	---	5	3	4	3
BR. TERR. AM. NES	261	249	---	4	2	4	3
AFRICA	677	350	117	146	172	184	173
UNION S. AFRICA	130	77	2	---	---	---	---
NIGERIA	168	67	10	11	20	7	6
ANGOLA	49	60	76	105	118	124	116
MOZAMBIQUE	20	13	19	23	24	33	37
ASIA	484	230	18	11	7	15	9
MALAYSIA INC. SINGAP	127	78	2	---	---	---	---
OCEANIA	191	114	5	4	6	8	18
AUSTRALIA	74	43	2	1	4	8	18
NEW ZEALAND	98	57	3	2	1	---	---
OTHER	5	3	3	8	7	8	13

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 053- FRUITS, PRES. AND PREPS.							
WORLD	12,239	12,080	16,828	17,584	18,016	19,403	20,536
NORTH AMERICA	3,113	2,861	4,034	3,718	2,971	3,019	2,759
UNITED STATES	1,796	1,558	2,657	2,172	1,814	1,758	1,631
CANADA	1,317	1,303	1,377	1,546	1,157	1,261	1,128
EUROPE	5,714	5,859	8,374	9,225	10,582	11,705	13,252
EEC	2,948	2,418	3,221	3,594	4,044	4,062	4,657
BELGIUM-LUXEMBOURG	236	192	221	241	273	353	369
FRANCE	218	305	440	771	827	991	1,025
GERMANY	2,285	1,683	2,077	2,122	2,311	1,981	2,549
ITALY	118	146	270	314	284	406	322
NETHERLANDS	91	92	213	146	349	331	392
EFTA	1,869	2,114	3,359	3,958	4,552	5,444	6,587
AUSTRIA	74	102	215	422	250	283	348
DENMARK	191	276	186	200	345	425	571
NORWAY	392	502	956	1,002	978	1,155	1,012
SWEDEN	584	579	1,281	1,735	2,128	2,517	2,615
UNITED KINGDOM	579	586	555	426	653	845	1,651
EASTERN EUROPE	145	232	333	218	320	187	194
GERMANY EAST	132	229	279	211	302	162	3
OTHER EUROPE	752	1,095	1,461	1,455	1,666	2,012	1,814
IRELAND	292	374	491	465	604	728	636
SPAIN	44	81	198	278	355	404	411
FINLAND	240	452	510	416	384	509	421
BRIT. AOC	150	150	199	198	198	216	196
LATIN AMERICA	432	435	650	812	774	757	758
CACM	1	1	---	2	1	2	4
LAFTA	64	58	69	57	69	67	115
OTHER LATIN AMERICA	367	376	581	753	704	688	639
BR. TERR. AM. NES	355	354	239	272	294	334	299
AFRICA	1,147	1,281	1,572	1,356	1,430	1,408	1,405
UNION S. AFRICA	220	234	316	270	196	240	280
NIGERIA	128	171	226	210	227	209	162
ASIA	1,382	1,225	1,645	1,989	1,810	1,968	1,763
JAPAN	124	105	236	235	270	269	277
MALAYSIA INC. SINGAP	500	477	545	570	620	---	---
HONG KONG	127	172	211	256	286	352	358
OCEANIA	402	390	493	443	413	487	562
AUSTRALIA	323	310	355	327	282	347	461
OTHER	49	29	60	41	36	59	37

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 054- VEGETABLES, FRESH, FROZEN							
WORLD	28,108	36,324	36,524	36,418	35,652	45,559	40,534
NORTH AMERICA	751	831	911	1,052	724	608	657
UNITED STATES	715	802	875	797	589	555	589
EUROPE	21,536	29,192	30,996	29,133	28,976	37,294	33,756
EEC	9,290	11,058	15,054	13,680	12,855	15,978	16,872
BELGIUM-LUXEMBOURG	601	1,091	454	579	653	851	715
FRANCE	463	888	267	451	779	896	853
GERMANY	4,564	6,940	10,869	8,544	6,853	7,520	6,010
ITALY	2,947	1,404	2,817	2,546	3,417	4,117	5,182
NETHERLANDS	715	735	647	1,560	1,153	2,594	4,112
EFTA	6,245	12,794	10,551	8,955	6,914	10,257	8,073
NORWAY	292	478	686	485	647	321	254
PORTUGAL	1,029	608	929	713	749	2,966	1,790
SWEDEN	1,322	5,070	4,167	4,215	2,250	2,989	1,765
UNITED KINGDOM	3,133	6,010	4,246	3,062	2,549	2,718	3,233
EASTERN EUROPE	78	222	121	98	76	386	103
OTHER EUROPE	5,923	5,118	5,270	6,400	9,131	10,673	8,708
IRELAND	2,039	1,337	1,903	2,007	1,695	2,695	2,391
SPAIN	2,761	2,846	2,631	2,551	5,913	5,829	4,074
FINLAND	742	632	471	1,454	1,156	1,554	1,515
LATIN AMERICA	1,114	892	842	1,147	1,073	1,023	860
CACM	5	9	19	17	8	37	18
LAFTA	337	348	384	628	246	311	417
OTHER LATIN AMERICA	772	535	439	502	819	675	425
AFRICA	2,035	2,215	2,212	2,542	2,526	2,636	2,802
UNION S. AFRICA	779	831	884	895	1,004	1,039	779
ANGOLA	325	233	412	904	656	486	614
ASIA	1,889	2,795	1,441	2,113	1,691	3,274	1,632
CYPRUS	389	783	260	605	307	1,312	369
OCEANIA	736	348	64	396	602	672	777
AUSTRALIA	717	341	51	347	550	642	762
OTHER	47	51	58	35	60	52	50

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0555 VEGETABLES, PRES. OR PREP. NES							
WORLD	9,692	9,843	14,710	17,163	25,099	30,125	40,330
NORTH AMERICA	1,215	1,449	2,410	2,778	5,139	8,668	18,372
UNITED STATES	897	852	742	939	2,110	3,804	13,326
CANADA	318	597	1,668	1,839	3,029	4,864	5,046
EUROPE	3,825	4,685	8,239	9,583	15,079	16,193	16,307
EEC	1,348	1,335	2,087	2,158	3,993	2,650	2,136
BELGIUM-LUXEMBOURG	86	48	121	243	467	412	398
FRANCE	146	98	377	334	771	366	192
GERMANY	1,009	1,084	1,314	1,361	2,204	1,355	1,215
NETHERLANDS	53	65	75	181	480	396	279
EFTA	2,075	3,017	5,704	6,906	10,362	12,613	13,235
DENMARK	192	159	346	241	319	443	346
NORWAY	317	361	512	523	589	567	611
SWEDEN	289	700	874	769	931	1,476	1,640
SWITZERLAND	65	97	76	149	459	304	477
UNITED KINGDOM	1,197	1,686	3,804	5,123	7,971	9,689	10,040
EASTERN EUROPE	1	2	3	6	3	18	29
OTHER EUROPE	401	331	445	513	721	912	907
BRIT. AOC	249	184	182	218	253	272	244
LATIN AMERICA	585	682	685	715	826	712	829
CACM	7	10	3	6	14	14	11
LAFTA	215	315	302	261	396	299	536
OTHER LATIN AMERICA	363	357	380	448	416	399	282
AFRICA	1,973	1,448	1,473	2,128	2,058	1,779	2,425
UNION S. AFRICA	497	24	37	330	53	40	725
NIGERIA	271	241	220	264	295	277	200
ANGOLA	189	199	285	504	532	432	517
MOZAMBIQUE	128	149	155	260	246	303	356
ASIA	1,861	1,487	1,818	1,837	1,875	2,578	2,191
JAPAN	208	157	117	77	90	572	624
MALAYSIA INC. SINGAP	667	405	623	604	646	---	---
BAHRAIN	220	219	236	253	250	246	253
OCEANIA	217	79	68	106	108	183	152
OTHER	16	13	17	16	14	12	54

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0611 RAW SUGAR							
WORLD	716	1,356	516	279	19	9	25
NORTH AMERICA	1	---	---	---	---	---	---
EUROPE	713	1,352	509	278	4	6	24
EEC	604	743	---	1	---	---	7
FRANCE	30	30	---	---	---	---	---
GERMANY	353	383	---	1	---	---	---
ITALY	220	329	---	---	---	---	4
EFTA	109	609	508	274	4	---	3
AUSTRIA	108	113	2	---	---	---	17
SWEDEN	---	496	506	273	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	1	3	---	6	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	2	1	7	2	1
ASIA	1	1	1	---	5	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	1	3	4	---	3	1	---

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 071- COFFEE							
WORLD	11,509	11,266	12,049	13,359	18,830	22,724	16,795
NORTH AMERICA	76	211	141	209	199	430	847
UNITED STATES	37	183	105	178	164	319	357
EUROPE	7,470	8,157	9,141	10,375	14,969	18,717	12,559
EEC	5,294	5,802	6,472	7,097	11,390	14,534	7,978
FRANCE	231	170	186	186	217	175	237
GERMANY	2,133	2,177	2,093	2,027	2,000	2,089	1,985
ITALY	2,669	3,202	4,033	4,628	8,892	11,959	5,388
NETHERLANDS	152	163	91	136	233	158	319
EFTA	1,253	1,418	1,494	1,821	2,177	2,811	2,951
AUSTRIA	272	282	301	444	602	760	1,032
DENMARK	273	421	199	115	119	271	136
NORWAY	185	149	293	391	409	453	498
PORTUGAL	81	95	228	275	291	114	295
SWEDEN	338	263	315	277	480	697	769
UNITED KINGDOM	49	154	90	246	141	447	204
EASTERN EUROPE	71	25	9	40	54	82	116
OTHER EUROPE	852	912	1,166	1,417	1,348	1,290	1,514
IRELAND	419	460	721	787	737	706	915
FINLAND	140	245	223	349	220	205	202
BRIT. AOC	153	161	156	213	244	229	201
LATIN AMERICA	583	427	339	380	402	475	415
CACM	2	---	1	---	---	---	---
LAFTA	---	4	---	17	1	---	---
OTHER LATIN AMERICA	581	423	338	363	401	475	415
BR. TERR. AM. NES	505	381	161	144	184	214	196
AFRICA	1,599	1,222	1,097	915	1,200	1,001	784
GHANA	321	278	214	120	252	91	52
NIGERIA	459	290	244	106	80	78	88
KENYA	---	---	209	221	286	283	129
ASIA	1,648	1,167	1,269	1,428	1,985	2,042	2,128
MALAYSIA INC. SINGAP	538	454	525	581	804	---	---
HONG KONG	168	132	142	177	229	237	241
CYPRUS	197	116	146	133	206	143	154
OCEANIA	124	70	44	42	66	35	45
OTHER	9	12	18	10	9	24	17

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 072- COCOA							
WORLD	7,917	7,323	4,847	4,902	5,572	6,433	6,946
NORTH AMERICA	2,439	1,955	1,428	1,464	1,287	1,852	1,662
UNITED STATES	232	44	397	131	96	108	50
CANADA	2,207	1,911	1,031	1,333	1,191	1,744	1,612
EUROPE	3,113	3,225	1,644	1,435	2,396	2,750	3,326
EEC	1,725	2,009	480	398	481	486	641
GERMANY	1,192	523	54	140	168	101	140
ITALY	65	110	91	87	113	114	110
NETHERLANDS	428	1,304	330	158	178	242	385
EFTA	1,125	1,013	606	666	863	501	690
AUSTRIA	68	215	7	7	363	224	282
DENMARK	546	439	350	388	304	71	154
SWEDEN	257	210	160	192	128	172	125
EASTERN EUROPE	50	22	40	89	41	42	15
OTHER EUROPE	213	181	518	282	1,011	1,721	1,980
IRELAND	94	65	385	150	904	1,605	1,804
LATIN AMERICA	977	916	767	718	683	673	604
CACM	10	14	14	11	7	13	8
LAFTA	118	133	149	123	95	79	41
PERU	81	63	84	77	76	64	25
OTHER LATIN AMERICA	849	769	604	584	581	581	555
BR. TERR. AM. NES	744	679	163	148	162	160	142
TRINIDAD TOBAGO	---	---	244	234	217	230	200
BRIT. GUIANA	---	---	89	86	103	93	76
AFRICA	495	492	492	609	536	605	694
UNION S. AFRICA	12	37	181	370	118	241	339
NIGERIA	117	95	20	27	51	60	70
KENYA	---	---	161	81	193	207	195
ASIA	342	381	318	386	413	377	393
OCEANIA	539	337	187	279	256	168	261
AUSTRALIA	475	257	130	159	108	127	227
OTHER	12	17	11	11	1	8	6

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 073- CHOCOLATE AND PREPS.							
WORLD	33,803	37,926	43,453	44,109	47,430	49,235	57,681
NORTH AMERICA	8,589	8,146	8,074	9,283	9,201	10,420	12,613
UNITED STATES	5,766	5,931	5,816	6,126	6,463	7,526	9,023
CANADA	2,823	2,215	2,258	3,157	2,738	2,894	3,590
EUROPE	16,625	20,958	25,010	23,776	26,029	27,180	33,207
EEC	10,383	13,555	16,220	12,880	14,265	12,630	16,789
BELGIUM-LUXEMBOURG	730	1,005	1,385	1,115	1,353	1,299	1,190
FRANCE	681	755	1,107	983	1,054	957	1,232
GERMANY	7,571	8,329	9,237	7,981	8,879	7,082	9,140
ITALY	1,133	1,689	2,087	2,145	2,343	2,785	4,380
NETHERLANDS	268	1,777	2,404	656	636	507	847
EFTA	4,092	5,222	6,502	8,071	9,051	11,483	13,359
AUSTRIA	774	996	1,268	1,485	1,770	2,175	2,624
DENMARK	1,470	1,809	2,319	3,251	2,880	3,269	3,455
NORWAY	436	734	580	570	692	923	1,507
SWEDEN	395	491	880	1,146	1,588	1,873	2,369
UNITED KINGDOM	932	1,098	1,235	1,337	1,652	2,523	2,677
EASTERN EUROPE	62	88	129	158	193	312	469
OTHER EUROPE	2,088	2,093	2,159	2,667	2,520	2,755	2,590
IRELAND	1,370	1,313	1,065	1,303	711	719	388
BRIT. AOC	580	538	657	714	724	768	846
LATIN AMERICA	1,772	1,660	1,787	1,845	2,261	2,238	2,301
CACM	23	27	28	33	38	49	54
LAFTA	564	429	356	361	394	425	384
OTHER LATIN AMERICA	1,185	1,204	1,403	1,451	1,829	1,764	1,863
BR. TERR. AM. NES	959	1,001	428	457	549	577	616
AFRICA	1,999	2,123	2,547	2,651	2,733	2,489	2,551
ASIA	4,497	4,744	5,574	6,170	6,753	6,569	6,535
JAPAN	833	704	770	879	789	697	909
MALAYSIA INC. SINGAP	1,215	1,478	1,783	1,726	1,747	---	---
HONG KONG	713	1,007	1,164	1,566	1,763	1,867	1,806
KUWAIT	415	459	593	593	800	789	1,079
OCEANIA	313	290	446	381	447	329	456
OTHER	8	5	15	3	6	10	18

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 074- TEA AND MATE							
WORLD	248	349	416	492	469	485	636
NORTH AMERICA	---	---	---	---	3	1	3
EUROPE	245	345	414	474	460	476	613
EEC	197	290	263	253	253	306	407
FRANCE	14	21	21	22	35	59	68
GERMANY	156	188	159	154	150	144	136
ITALY	25	79	81	74	66	100	201
EFTA	44	33	88	135	126	91	126
AUSTRIA	3	6	14	22	17	25	28
DENMARK	3	---	6	13	19	20	24
NORWAY	20	13	53	61	62	32	59
SWEDEN	18	13	12	8	11	10	9
UNITED KINGDOM	---	---	2	30	17	3	5
EASTERN EUROPE	---	1	---	---	---	5	9
OTHER EUROPE	4	21	63	86	81	74	71
FINLAND	4	21	63	83	72	67	62
LATIN AMERICA	---	---	---	11	1	1	4
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	11	1	1	4
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	1	1	3	4	2	3	7
ASIA	---	---	---	---	---	---	2
OCEANIA	---	---	---	---	---	---	---
OTHER	2	3	-1	3	3	4	7

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 075- SPICES							
WORLD	1,034	1,455	1,280	1,371	1,510	1,733	2,065
NORTH AMERICA	26	99	52	66	30	27	58
UNITED STATES	16	92	45	62	17	26	48
EUROPE	500	668	714	774	870	1,146	1,494
EEC	176	219	259	333	422	479	744
BELGIUM-LUXEMBOURG	12	18	26	24	22	22	18
GERMANY	102	121	129	201	251	259	359
ITALY	17	13	61	51	65	115	239
NETHERLANDS	39	61	33	42	66	53	111
EFTA	110	187	188	169	208	256	310
DENMARK	33	55	54	69	81	81	94
NORWAY	34	68	47	37	32	51	77
SWEDEN	20	34	34	25	38	46	39
SWITZERLAND	9	14	17	19	34	49	38
EASTERN EUROPE	1	---	4	21	5	9	18
OTHER EUROPE	213	262	263	251	235	402	422
ICELAND	40	73	79	88	65	72	84
IRELAND	71	69	93	78	79	111	125
SPAIN	5	---	10	3	6	117	71
FINLAND	84	101	66	71	72	90	124
LATIN AMERICA	115	110	113	120	167	168	143
CACM	---	---	---	1	2	2	2
LAFTA	26	13	11	16	40	26	37
OTHER LATIN AMERICA	89	97	102	103	125	140	104
JAMAICA	---	---	20	25	23	26	26
BR. TERR. AM. NES	75	84	22	24	27	34	25
TRINIDAD TOBAGO	---	---	44	34	52	54	36
AFRICA	220	208	248	243	305	243	237
UNION S. AFRICA	36	30	64	39	26	17	8
GHANA	25	16	28	10	61	5	5
NIGERIA	32	38	32	35	46	50	21
ANGOLA	39	55	52	81	84	67	99
MOZAMBIQUE	26	24	29	39	46	59	73
ASIA	133	328	114	127	102	106	99
JAPAN	61	267	38	59	---	3	3
MALAYSIA INC. SINGAP	31	21	25	18	30	---	---
OCEANIA	30	23	25	33	22	27	20
AUSTRALIA	16	15	18	25	18	21	14
OTHER	10	19	14	8	14	16	14

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 081- ANIMAL FEEDS							
WORLD	40,819	45,346	56,530	74,227	107,753	116,482	153,611
NORTH AMERICA	154	246	537	365	583	4,378	17,008
UNITED STATES	90	187	447	281	435	4,260	16,823
EUROPE	38,813	42,828	54,018	71,759	103,466	107,121	130,878
EEC	11,897	14,661	17,655	22,815	37,403	41,621	51,227
BELGIUM-LUXEMBOURG	575	599	1,039	1,610	3,503	4,464	4,882
FRANCE	2,469	1,201	2,225	4,470	5,889	8,917	8,661
GERMANY	7,270	11,070	11,330	13,051	17,851	21,065	25,631
ITALY	524	379	781	1,001	1,805	2,263	2,669
NETHERLANDS	1,059	1,412	2,280	2,683	8,355	4,912	9,384
EFTA	21,712	22,805	30,679	40,079	49,820	49,552	60,122
AUSTRIA	593	592	712	1,143	1,501	1,165	1,105
DENMARK	2,601	998	1,799	1,769	2,434	3,086	3,658
NORWAY	309	666	741	916	1,140	1,389	1,501
SWEDEN	7,754	10,370	13,819	17,040	19,868	19,977	22,844
SWITZERLAND	1,625	2,892	3,351	3,644	4,392	4,009	4,474
UNITED KINGDOM	8,707	7,172	10,106	15,503	20,350	19,882	26,213
EASTERN EUROPE	2,912	1,823	2,498	5,044	10,843	9,950	11,405
GERMANY EAST	556	2	120	1,264	2,807	2,604	1,654
POLAND	1,530	1,287	1,524	2,359	2,876	4,392	4,638
CZECHOSLOVAKIA	476	451	317	788	2,134	1,200	1,499
OTHER EUROPE	2,292	3,539	3,186	3,821	5,400	5,998	8,124
IRELAND	473	721	1,114	1,014	1,179	1,269	1,538
FINLAND	1,085	2,046	815	1,081	1,602	2,005	2,362
LATIN AMERICA	163	551	176	173	622	857	300
CACM	---	---	---	13	---	9	5
LAFTA	36	16	19	17	86	151	126
OTHER LATIN AMERICA	127	535	157	143	536	697	169
AFRICA	638	596	654	682	1,299	782	1,115
ASIA	927	955	1,059	1,126	1,558	2,114	2,694
OCEANIA	100	154	73	111	228	1,230	1,597
OTHER	24	16	13	11	-3	---	19

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0812 BRAN, POLLARD AND SHARPS							
WORLD	136	284	295	325	580	1,219	509
NORTH AMERICA	2	3	2	5	4	3	3
EUROPE	126	282	288	320	577	1,215	506
EEC	16	6	8	3	7	320	3
GERMANY	1	1	7	3	6	319	1
EFTA	99	257	276	308	566	893	502
AUSTRIA	2	3	16	26	88	100	30
DENMARK	1	---	---	---	---	324	---
SWEDEN	74	234	259	282	478	469	452
UNITED KINGDOM	20	17	---	---	---	---	20
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	11	19	4	9	4	2	1
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	6	---	5	---	---	---	---
ASIA	4	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	-2	-1	---	---	-1	1	---

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0813 OILSEED CAKE AND MEAL							
WORLD	10,624	15,139	13,766	15,379	16,345	16,841	23,489
NORTH AMERICA	---	---	1	---	1	---	---
EUROPE	10,612	15,116	13,753	15,376	16,280	16,828	23,418
EEC	3,696	6,249	2,009	2,391	2,928	4,126	5,272
FRANCE	87	220	129	3	57	611	713
GERMANY	3,557	5,746	1,782	2,289	2,812	3,474	4,524
EFTA	6,154	8,857	10,813	12,833	13,047	12,661	17,041
DENMARK	385	106	855	719	159	1,119	2,278
NORWAY	24	303	229	191	209	140	23
SWEDEN	5,558	8,309	9,557	11,648	12,467	11,160	13,933
UNITED KINGDOM	80	94	128	247	160	209	708
EASTERN EUROPE	756	---	455	143	102	5	866
POLAND	500	---	---	51	102	---	605
OTHER EUROPE	6	10	476	9	203	36	239
LATIN AMERICA	2	3	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	2	3	---	---	---	---	---
AFRICA	3	2	2	2	61	12	71
ASIA	6	12	8	---	5	3	---
OCEANIA	---	2	---	---	---	---	---
OTHER	1	4	2	1	-2	-2	---

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0814 MEAT AND FISH MEAL							
WORLD	22,884	19,420	23,472	37,370	61,639	62,782	88,820
NORTH AMERICA	54	141	189	---	17	3,903	15,986
UNITED STATES	10	99	189	---	17	3,903	15,986
EUROPE	22,693	19,214	23,257	37,342	61,127	58,319	72,559
EEC	5,955	4,785	7,029	10,556	20,789	18,432	27,084
BELGIUM-LUXEMBOURG	505	413	870	1,427	3,402	4,343	4,737
FRANCE	2,245	841	1,807	4,218	5,418	7,444	7,301
GERMANY	2,425	2,584	3,087	2,982	4,710	3,294	9,839
ITALY	215	184	490	683	1,612	1,784	2,242
NETHERLANDS	565	763	775	1,246	5,647	1,567	2,965
EFTA	13,240	10,314	13,221	20,764	29,602	28,835	35,166
AUSTRIA	469	515	622	977	1,290	922	893
DENMARK	1,892	559	560	674	1,903	1,037	741
SWEDEN	1,304	687	815	2,272	3,928	5,032	5,669
SWITZERLAND	1,283	1,541	1,288	1,965	2,784	2,201	2,294
UNITED KINGDOM	8,284	6,987	9,936	14,873	19,685	19,576	25,409
EASTERN EUROPE	2,115	1,768	1,911	4,688	8,328	8,650	7,932
GERMANY EAST	556	---	120	1,260	2,806	2,604	1,650
POLAND	1,030	1,287	1,524	2,271	2,641	4,330	3,716
CZECHOSLOVAKIA	476	451	267	738	2,134	911	1,361
OTHER EUROPE	1,383	2,347	1,096	1,334	2,408	2,402	2,377
FINLAND	1,026	1,967	776	962	1,399	1,322	1,238
LATIN AMERICA	9	10	---	---	392	525	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	9	10	---	---	392	525	---
AFRICA	48	43	19	24	100	19	7
ASIA	73	8	6	6	1	14	241
OCEANIA	1	1	---	---	---	---	25
OTHER	6	3	1	-2	2	2	2

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 091- MARGARINE AND SHORTENING							
WORLD	13,613	13,989	14,506	16,346	16,299	16,211	15,671
NORTH AMERICA	124	149	159	122	166	89	89
EUROPE	9,202	9,556	9,862	8,513	10,877	8,170	7,096
EEC	2,320	2,114	2,090	2,047	2,273	2,685	2,279
GERMANY	1,065	1,006	868	1,000	1,200	1,319	1,489
ITALY	471	417	559	435	152	17	58
NETHERLANDS	621	537	511	441	773	1,134	570
EFTA	4,736	5,004	4,490	2,451	6,894	5,031	3,625
SWEDEN	1,775	1,791	1,670	156	2,243	207	147
UNITED KINGDOM	2,854	3,144	2,764	2,237	4,516	4,652	3,303
EASTERN EUROPE	994	1,229	2,126	3,376	218	48	575
POLAND	---	---	265	1,882	---	1	272
CZECHOSLOVAKIA	353	257	318	557	---	27	1
HUNGARY	637	611	1,272	937	217	11	297
OTHER EUROPE	1,152	1,209	1,156	639	1,492	406	617
SPAIN	472	531	540	76	693	24	19
BRIT. AOC	576	572	550	543	476	325	294
LATIN AMERICA	596	580	591	972	753	732	731
CACM	2	1	---	---	---	---	---
LAFTA	1	3	8	4	38	15	8
OTHER LATIN AMERICA	593	576	583	968	715	717	723
BR. TERR. AM. NES	585	569	568	648	626	698	704
AFRICA	2,205	2,253	2,265	2,350	2,817	2,526	2,909
SIERRA LEONE	192	189	208	210	247	271	339
GHANA	983	820	615	542	869	327	538
ANGOLA	147	216	348	392	483	571	682
BR. AOC AFR. NES	56	446	453	572	574	637	440
ASIA	1,343	1,293	1,447	1,324	1,619	1,355	1,616
MALAYSIA INC. SINGAP	204	198	235	221	281	---	---
HONG KONG	189	156	176	181	244	187	177
CYPRUS	495	459	555	539	623	596	598
OCEANIA	135	149	175	133	56	56	100
OTHER	8	9	7	2,932	11	3,283	3,130

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 0913 LARD, ETC.							
WORLD	7,122	7,411	6,206	7,526	6,546	7,617	6,387
NORTH AMERICA	117	148	12	---	---	---	---
EUROPE	5,653	5,988	6,023	7,096	6,349	7,428	6,227
EEC	2,033	1,822	1,305	1,288	1,652	2,443	2,090
GERMANY	931	885	727	802	960	1,232	1,452
ITALY	462	406	108	7	---	8	37
NETHERLANDS	566	478	435	426	668	1,112	548
EFTA	2,538	2,836	2,530	2,363	4,457	4,907	3,498
UNITED KINGDOM	2,440	2,760	2,465	2,223	4,265	4,638	3,292
EASTERN EUROPE	994	1,228	2,124	3,376	218	47	567
GERMANY EAST	---	358	270	---	---	---	---
POLAND	---	---	264	1,882	---	1	267
CZECHOSLOVAKIA	353	257	318	557	---	27	---
HUNGARY	637	611	1,272	937	217	11	297
OTHER EUROPE	88	102	64	69	22	31	72
LATIN AMERICA	392	388	29	316	53	35	28
CACM	2	1	---	---	---	---	---
LAFTA	---	3	3	1	32	---	---
OTHER LATIN AMERICA	390	384	26	315	21	35	28
BR. TERR. AM. NES	387	380	24	5	14	32	23
AFRICA	371	295	83	50	50	48	28
ASIA	545	528	57	59	91	100	94
OCEANIA	40	62	---	1	---	---	---
OTHER	4	2	2	4	3	6	10

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 1121 WINE OF FRESH GRAPES							
WORLD	29,925	29,476	33,092	40,390	46,496	50,556	55,052
NORTH AMERICA	1,424	1,576	1,692	2,122	2,857	3,698	4,872
UNITED STATES	878	1,013	1,247	1,596	2,188	2,896	3,795
CANADA	546	563	445	526	669	802	1,077
EUROPE	17,830	17,827	18,359	21,648	26,121	26,492	26,651
EEC	8,652	8,896	10,018	11,957	14,169	14,645	13,482
BELGIUM-LUXEMBOURG	1,484	1,303	1,462	1,978	2,371	1,766	1,349
FRANCE	3,366	4,173	4,835	5,102	5,837	7,179	7,157
GERMANY	2,679	2,472	2,609	3,596	4,216	4,262	3,261
NETHERLANDS	982	813	966	1,128	1,565	1,249	1,507
EFTA	8,242	8,084	7,395	8,630	10,740	10,199	11,952
DENMARK	696	800	706	831	1,434	1,714	1,918
NORWAY	564	635	362	458	555	655	572
SWEDEN	1,107	900	931	1,291	1,657	1,597	1,926
SWITZERLAND	1,306	903	955	979	1,161	1,365	1,537
UNITED KINGDOM	4,462	4,706	4,231	4,866	5,738	4,630	5,757
EASTERN EUROPE	178	65	134	138	196	613	258
OTHER EUROPE	758	782	812	923	1,016	1,035	959
IRELAND	466	483	491	573	601	493	372
LATIN AMERICA	590	549	631	723	933	1,195	1,688
CACM	11	3	16	16	18	17	21
LAFTA	173	131	180	137	180	313	780
OTHER LATIN AMERICA	406	415	435	570	735	865	887
AFRICA	9,316	8,863	11,679	15,127	15,752	18,409	20,971
ANGOLA	5,519	5,428	7,166	9,622	9,923	11,681	13,398
MOZAMBIQUE	2,917	2,681	3,777	4,891	5,199	6,138	6,853
ASIA	711	587	633	684	726	644	684
OCEANIA	18	28	51	45	58	66	110
OTHER	36	46	47	41	49	52	76

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 1123 BEER							
WORLD	20,770	22,331	25,672	28,759	29,312	33,400	34,955
NORTH AMERICA	1,694	2,242	2,696	3,725	3,141	3,336	3,360
UNITED STATES	1,368	1,865	2,444	3,340	2,715	2,953	2,726
CANADA	326	377	252	385	426	383	634
EUROPE	11,352	12,528	15,573	17,235	18,976	22,725	23,975
EEC	4,852	6,122	7,677	8,582	8,965	10,428	10,427
BELGIUM-LUXEMBOURG	2,355	3,090	4,139	4,532	5,091	5,953	6,666
FRANCE	479	570	704	859	928	1,166	985
GERMANY	1,237	1,446	1,560	1,715	1,574	1,716	1,228
ITALY	616	799	971	1,045	1,079	1,278	1,215
NETHERLANDS	165	217	303	431	293	315	333
EFTA	5,648	5,149	5,707	6,037	7,962	9,879	11,125
SWEDEN	569	654	941	1,043	2,568	4,492	5,138
UNITED KINGDOM	4,909	4,292	4,520	4,645	4,215	4,797	5,265
EASTERN EUROPE	21	39	88	121	176	317	542
OTHER EUROPE	831	1,218	2,101	2,495	1,873	2,101	1,881
IRELAND	452	836	1,668	1,771	1,245	1,473	1,088
BRIT. AOC	248	256	288	253	299	285	359
LATIN AMERICA	1,515	1,218	1,071	1,179	1,199	1,292	1,199
CACM	4	4	2	4	7	5	14
LAFTA	76	11	10	7	7	19	27
OTHER LATIN AMERICA	1,435	1,203	1,059	1,168	1,185	1,268	1,158
BR. TERR. AM. NES	1,196	987	508	576	523	564	507
AFRICA	2,181	2,154	1,934	1,802	1,896	1,802	1,909
LIBYA	378	390	415	429	434	342	310
ANGOLA	35	63	131	204	308	529	734
ASIA	3,931	4,110	4,296	4,723	4,023	4,158	3,698
MALAYSIA INC. SINGAP	1,108	1,118	1,254	1,210	794	---	---
HONG KONG	271	327	412	482	443	681	657
CYPRUS	451	409	379	781	676	643	617
FED. SOUTH ARABIA	764	845	918	1,055	918	869	458
BAHRAIN	493	557	548	538	535	566	595
OCEANIA	86	69	86	84	70	75	114
OTHER	11	10	16	11	7	12	700

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 121- TOBACCO, UNMANUFACTURED							
WORLD	764	667	738	450	583	709	585
NORTH AMERICA	22	161	10	24	160	7	4
UNITED STATES	22	161	8	22	155	4	2
EUROPE	740	506	725	419	419	694	553
EEC	592	415	144	135	212	551	437
BELGIUM-LUXEMBOURG	10	33	25	6	5	3	57
GERMANY	513	348	85	92	158	407	278
NETHERLANDS	69	34	33	28	45	137	92
EFTA	129	83	578	273	185	85	51
DENMARK	17	47	3	48	19	40	13
NORWAY	23	4	3	19	6	11	7
SWEDEN	86	29	548	196	151	34	28
EASTERN EUROPE	15	7	2	4	5	4	---
OTHER EUROPE	4	1	1	7	17	54	65
FINLAND	4	1	1	7	17	54	65
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	3
ASIA	---	---	---	7	4	5	23
OCEANIA	---	---	---	---	---	---	---
OTHER	2	---	3	---	---	3	2

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 211- HIDES AND SKINS, CRUDE							
WORLD	46,222	46,763	42,430	45,630	48,664	61,783	56,960
NORTH AMERICA	2,680	2,711	2,194	2,174	2,383	3,161	1,898
UNITED STATES	2,588	2,641	2,064	2,163	2,350	3,083	1,873
EUROPE	42,661	42,954	38,828	42,182	45,290	57,318	53,961
EEC	20,536	21,256	18,417	19,745	19,505	25,221	25,915
BELGIUM-LUXEMBOURG	1,171	1,301	1,182	1,185	1,253	1,551	2,451
FRANCE	1,603	2,041	2,115	2,065	1,381	2,135	2,174
GERMANY	10,597	11,063	8,812	9,974	9,927	11,747	10,335
ITALY	2,947	2,746	3,186	2,583	3,085	5,308	6,380
NETHERLANDS	4,218	4,105	3,122	3,938	3,859	4,480	4,575
EFTA	11,346	12,618	11,591	10,511	10,380	12,528	11,493
DENMARK	1,564	1,654	1,799	1,604	1,246	1,385	1,083
NORWAY	484	627	741	574	594	1,194	638
SWEDEN	3,367	3,396	3,125	3,653	3,730	4,204	4,715
SWITZERLAND	475	722	520	625	730	644	658
UNITED KINGDOM	4,787	5,587	5,042	3,809	3,772	4,473	3,670
EASTERN EUROPE	9,674	7,184	7,209	10,215	13,633	16,846	13,628
GERMANY EAST	2,895	2,765	3,844	4,512	4,061	5,180	3,420
POLAND	864	930	915	1,166	1,465	3,372	3,175
CZECHOSLOVAKIA	3,506	2,380	1,710	2,827	3,915	4,458	3,392
HUNGARY	395	597	417	631	1,321	737	905
ROMANIA	1,019	321	---	395	1,633	1,330	1,129
YUGOSLAVIA	905	123	254	681	1,144	1,453	1,553
OTHER EUROPE	1,105	1,896	1,611	1,711	1,772	2,723	2,925
IRELAND	834	1,072	1,187	1,322	1,370	1,684	1,289
LATIN AMERICA	3	---	5	---	133	26	128
CACM	1	---	---	---	---	---	---
LAFTA	---	---	5	---	131	23	128
OTHER LATIN AMERICA	2	---	---	---	2	3	---
AFRICA	55	74	93	61	47	334	155
ASIA	796	1,006	1,281	1,184	810	909	800
JAPAN	433	563	888	813	460	578	472
OCEANIA	19	13	23	22	1	23	13
OTHER	8	5	6	7	---	12	5

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 221- OILSEEDS, ETC.							
WORLD	8,033	6,266	10,175	13,957	16,291	10,440	8,827
NORTH AMERICA	1,974	742	483	376	348	174	534
UNITED STATES	1,884	718	475	354	320	152	513
EUROPE	4,702	4,988	9,632	13,504	15,786	10,112	7,785
EEC	3,217	4,116	7,128	10,681	12,716	7,009	6,211
BELGIUM-LUXEMBOURG	63	57	39	170	125	131	181
FRANCE	458	641	757	405	10	8	3
GERMANY	856	1,370	2,526	3,152	6,014	3,317	3,379
ITALY	904	772	3,258	6,514	5,027	3,142	2,087
NETHERLANDS	936	1,276	548	440	1,540	411	561
EFTA	291	684	1,016	996	1,092	1,097	824
NORWAY	66	310	299	376	328	203	266
UNITED KINGDOM	177	2	334	404	570	616	291
EASTERN EUROPE	458	164	1,380	1,680	1,256	1,143	464
GERMANY EAST	64	83	1	113	180	343	3
POLAND	35	1	---	927	833	31	1
CZECHOSLOVAKIA	356	77	1,376	640	229	753	406
OTHER EUROPE	736	24	108	147	722	863	286
FINLAND	733	19	91	102	557	661	135
LATIN AMERICA	7	7	11	19	14	28	20
CACM	---	---	---	---	---	---	---
LAFTA	2	3	9	7	8	20	14
OTHER LATIN AMERICA	5	4	2	12	6	8	6
AFRICA	1,303	448	4	5	42	17	338
ALGERIA	1,296	445	1	1	2	---	326
ASIA	3	3	11	7	13	1	29
OCEANIA	45	75	32	42	85	104	118
OTHER	-1	3	2	4	3	4	3

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2211 PEANUTS, GREEN							
WORLD	326	216	243	57	70	59	73
NORTH AMERICA	171	57	18	16	26	21	20
UNITED STATES	138	36	10	---	---	---	---
CANADA	33	21	8	16	26	21	20
EUROPE	97	76	180	40	46	37	54
EEC	85	51	126	17	26	16	7
BELGIUM-LUXEMBOURG	5	2	21	---	---	---	---
GERMANY	31	24	35	16	4	13	6
NETHERLANDS	46	19	67	---	17	3	1
EFTA	9	16	27	1	2	1	8
NORWAY	3	9	5	---	1	1	---
SWEDEN	4	5	20	1	---	---	3
EASTERN EUROPE	---	---	---	---	---	---	13
HUNGARY	---	---	---	---	---	---	12
OTHER EUROPE	3	9	27	22	18	20	26
IRELAND	1	2	11	---	---	---	---
SPAIN	---	---	2	---	4	6	7
FINLAND	---•	6	13	17	13	13	17
LATIN AMERICA	5	4	4	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	2	---	---	---	---
OTHER LATIN AMERICA	5	4	2	---	---	---	---
AFRICA	7	3	4	---	---	---	---
ASIA	1	1	2	---	---	---	---
OCEANIA	45	73	32	---	---	---	---
AUSTRALIA	43	67	29	---	---	---	---
NEW ZEALAND	2	6	3	---	---	---	---
OTHER	---	2	3	1	-2	1	-1

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2212 COPRA							
WORLD	7	42	---	---	---	1	---
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	7	42	---	---	---	1	---
EEC	7	---	---	---	---	---	---
BELGIUM-LUXEMBOURG	7	---	---	---	---	---	---
EFTA	---	42	---	---	---	1	---
DENMARK	---	42	---	---	---	1	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2213 PALM NUTS AND KERNELS							
WORLD	---	---	---	---	---	---	---
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	---	---	---	---
EEC	---	---	---	---	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---

TABLE 7--CONTINUED
EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2214 SOYBEANS							
WORLD	1	---	1	---	---	---	---
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	1	---	---	---	---	---	---
EEC	---	---	---	---	---	---	---
EFTA	1	---	---	---	---	---	---
SWITZERLAND	1	---	---	---	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	1	---	---	---	---
KUWAIT	---	---	1	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---

TABLE 7--CONTINUED
EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2216 COTTONSEED							
WORLD	---	---	---	---	9	63	25
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	---	9	63	25
EEC	---	---	---	---	9	24	25
GERMANY	---	---	---	---	---	24	25
NETHERLANDS	---	---	---	---	9	---	---
EFTA	---	---	---	---	---	39	---
AUSTRIA	---	---	---	---	---	2	---
SWEDEN	---	---	---	---	---	37	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2217 CASTOR OIL SEEDS							
WORLD	---	---	---	---	1	1	---
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	---	---	---	---	1	1	---
EEC	---	---	---	---	1	1	---
FRANCE	---	---	---	---	1	1	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 262- WOOL AND HAIR							
WORLD	209,405	184,658	226,289	210,617	172,634	170,418	132,759
NORTH AMERICA	42,840	42,857	50,764	49,504	48,053	39,299	33,377
UNITED STATES	27,130	25,286	29,396	26,661	27,089	22,948	17,588
CANADA	15,710	17,571	21,368	22,843	20,964	16,351	15,789
EUROPE	102,706	100,427	117,829	119,500	97,272	103,540	80,336
EEC	41,193	41,256	49,377	43,127	33,798	37,274	26,453
BELGIUM-LUXEMBOURG	3,989	4,406	5,590	6,266	4,072	2,999	1,888
FRANCE	5,422	4,262	6,028	5,513	4,285	4,581	2,790
GERMANY	11,118	10,712	11,524	9,717	8,589	8,508	6,089
ITALY	17,454	18,337	22,392	17,866	13,090	16,371	13,199
NETHERLANDS	3,210	3,539	3,843	3,765	3,762	4,815	2,487
EFTA	25,554	24,429	28,527	30,840	23,664	22,878	18,748
AUSTRIA	5,110	4,220	4,623	5,320	3,765	4,055	3,845
DENMARK	4,091	4,249	5,249	4,495	2,934	2,520	2,096
NORWAY	2,628	2,902	3,439	3,825	2,971	3,611	3,125
SWEDEN	8,297	8,406	8,921	10,224	7,769	6,422	4,623
SWITZERLAND	3,570	2,937	3,544	4,264	3,547	3,378	2,548
EASTERN EUROPE	11,763	10,241	13,007	15,609	13,691	14,470	11,621
POLAND	2,770	3,126	2,970	3,493	5,099	3,661	2,893
CZECHOSLOVAKIA	2,047	2,003	3,004	1,955	2,081	1,632	1,463
HUNGARY	995	1,406	2,413	3,672	1,596	2,115	1,419
YUGOSLAVIA	1,853	3,275	3,998	4,958	3,138	4,835	3,507
OTHER EUROPE	24,196	24,501	26,918	29,924	26,119	28,918	23,514
GREECE	9,469	9,254	10,938	9,903	10,636	11,500	7,626
IRELAND	5,500	5,536	6,024	9,088	7,706	8,480	8,385
FINLAND	7,589	6,859	7,914	9,537	6,199	7,478	6,305
LATIN AMERICA	5,754	3,477	1,301	1,016	1,006	673	386
CACM	---	---	---	---	36	6	4
LAFTA	5,011	3,055	967	523	629	369	232
OTHER LATIN AMERICA	743	422	334	493	341	298	150
AFRICA	10,963	10,458	14,101	14,949	9,838	6,387	3,660
UNION S. AFRICA	1,867	1,910	3,010	2,491	3,433	3,338	2,710
EGYPT	8,900	8,395	10,965	12,306	6,189	2,583	344
ASIA	45,140	24,675	39,857	21,996	13,292	17,551	13,158
JAPAN	20,257	10,143	15,169	7,822	5,186	6,678	5,335
CHINA MAINLAND	10,961	2,419	5,276	3,540	1,456	3,137	456
PAKISTAN	3,335	3,572	3,453	2,977	1,642	2,460	1,491
INDIA	7,228	4,401	11,702	2,619	785	234	275
OCEANIA	1,993	2,749	2,434	3,649	3,183	2,946	1,836
AUSTRALIA	1,285	2,021	1,799	2,856	2,442	2,157	1,338
OTHER	9	15	3	3	-10	22	6

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2631 RAW COTTON EXCLUDING LINTERS							
WORLD	529	567	5,146	330	316	427	720
NORTH AMERICA	6	2	1,140	---	---	---	---
UNITED STATES	6	---	1,114	---	---	---	---
EUROPE	503	526	3,119	323	308	423	711
EEC	388	275	1,939	181	126	106	156
BELGIUM-LUXEMBOURG	101	6	288	---	---	10	5
FRANCE	63	37	270	15	6	---	7
GERMANY	212	191	925	147	120	87	144
ITALY	1	---	257	6	---	9	---
NETHERLANDS	11	41	199	13	---	---	---
EFTA	1	169	584	122	182	316	505
AUSTRIA	---	53	64	14	1	98	6
NORWAY	---	4	195	12	61	113	385
SWEDEN	1	31	182	37	---	---	18
SWITZERLAND	---	---	59	---	---	60	33
UNITED KINGDOM	---	81	5	59	120	---	63
EASTERN EUROPE	37	43	21	---	---	1	50
CZECHOSLOVAKIA	37	27	21	---	---	---	---
OTHER EUROPE	77	39	575	20	---	---	---
IRELAND	22	39	375	---	---	---	---
FINLAND	55	---	82	---	---	---	---
LATIN AMERICA	2	---	132	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	2	---	23	---	---	---	---
OTHER LATIN AMERICA	---	---	109	---	---	---	---
AFRICA	6	39	404	4	6	5	8
UNION S. AFRICA	6	31	98	---	---	---	---
NIGERIA	---	---	98	---	---	---	---
ASIA	12	---	194	---	2	---	---
OCEANIA	---	---	150	---	---	---	---
NEW ZEALAND	---	---	130	---	---	---	---
OTHER	---	---	7	3	---	-1	1

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 265- VEGETABLE FIBERS EXC. COTTON AND JUTE							
WORLD	2,234	2,850	1,767	1,603	1,784	1,532	1,316
NORTH AMERICA	726	632	251	160	185	103	83
UNITED STATES	684	589	222	135	160	77	61
CANADA	42	43	29	25	25	26	22
EUROPE	1,151	1,853	1,235	1,113	1,404	1,283	1,075
EEC	604	1,365	812	718	784	388	305
BELGIUM-LUXEMBOURG	130	156	252	86	302	137	71
FRANCE	52	233	80	71	52	41	35
GERMANY	300	772	288	385	360	184	180
ITALY	91	117	142	90	36	17	7
NETHERLANDS	31	87	50	86	34	9	12
EFTA	203	219	169	224	354	364	170
AUSTRIA	14	5	9	13	22	94	32
DENMARK	33	29	28	40	81	83	30
SWEDEN	58	53	33	56	92	136	88
SWITZERLAND	16	40	9	39	17	16	5
UNITED KINGDOM	57	55	75	55	124	21	4
EASTERN EUROPE	75	3	---	10	13	17	12
OTHER EUROPE	269	266	254	161	253	514	588
IRELAND	42	78	41	43	50	340	543
SPAIN	102	82	21	3	10	13	20
FINLAND	108	85	152	101	160	132	9
LATIN AMERICA	261	181	152	151	83	72	45
CACM	---	---	1	3	1	7	2
LAFTA	243	171	136	131	68	46	27
BRAZIL	231	141	92	60	32	---	---
OTHER LATIN AMERICA	18	10	15	17	14	19	16
AFRICA	55	108	55	91	43	15	33
GHANA	3	57	31	50	22	---	4
ASIA	27	31	30	32	21	23	27
OCEANIA	15	35	33	47	39	34	47
AUSTRALIA	13	24	30	43	34	29	46
OTHER	-1	10	11	9	9	2	6

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 2921 PLANTS FOR DYEING, ETC.							
WORLD	1,491	1,578	5,953	37	125	32	56
NORTH AMERICA	15	22	587	---	32	---	22
UNITED STATES	14	22	444	---	32	---	22
CANADA	1	---	143	---	---	---	---
EUROPE	1,369	1,415	3,984	32	86	21	27
EEC	681	772	2,316	23	18	18	19
BELGIUM-LUXEMBOURG	19	50	293	---	1	---	---
FRANCE	54	132	675	2	2	2	3
GERMANY	354	353	730	21	15	16	16
ITALY	118	94	78	---	---	---	---
NETHERLANDS	136	143	540	---	---	---	---
EFTA	432	541	421	6	31	2	8
AUSTRIA	70	86	11	---	---	---	---
DENMARK	43	34	85	---	---	---	---
SWEDEN	66	87	161	---	---	---	---
SWITZERLAND	2	2	91	6	8	2	2
UNITED KINGDOM	222	293	---	---	23	---	5
EASTERN EUROPE	208	49	323	2	---	---	---
GERMANY EAST	11	13	277	---	---	---	---
HUNGARY	107	2	3	---	---	---	---
OTHER EUROPE	48	53	924	1	37	1	---
IRELAND	11	18	636	---	36	---	---
SPAIN	14	8	74	---	1	---	---
FINLAND	8	11	159	---	---	---	---
LATIN AMERICA	46	67	340	---	1	1	2
CACM	2	1	---	---	---	---	---
LAFTA	44	66	259	---	1	1	2
ARGENTINA	31	55	66	---	---	---	---
VENEZUELA	6	2	104	---	1	1	2
OTHER LATIN AMERICA	---	---	81	---	---	---	---
AFRICA	6	26	291	---	---	---	1
UNION S. AFRICA	---	---	213	---	---	---	---
ASIA	48	40	297	---	---	---	---
INDIA	11	13	72	---	---	---	---
OCEANIA	5	7	453	3	6	8	4
AUSTRALIA	5	7	338	3	6	8	4
NEW ZEALAND	---	---	114	---	---	---	---
OTHER	2	1	1	2	---	2	---

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 411- ANIMAL OILS AND FATS							
WORLD	34,591	30,330	24,722	28,874	41,823	45,957	48,064
NORTH AMERICA	2,222	2,522	1,829	1,869	1,927	1,069	783
UNITED STATES	1,918	2,306	1,672	1,685	1,766	952	672
EUROPE	29,212	24,644	20,793	24,371	37,423	41,707	44,741
EEC	16,655	15,295	11,012	10,105	14,594	13,212	12,351
BELGIUM-LUXEMBOURG	264	590	211	353	296	302	649
FRANCE	2,721	3,581	558	728	1,371	886	1,016
GERMANY	9,262	6,422	5,863	4,686	5,675	7,352	5,460
ITALY	1,270	1,236	1,517	1,386	1,177	1,899	1,441
NETHERLANDS	3,138	3,466	2,863	2,952	6,075	2,773	3,785
EFTA	9,131	6,199	6,849	11,044	19,717	25,507	30,092
DENMARK	698	618	708	909	1,108	1,008	882
NORWAY	1,139	1,157	1,337	2,109	1,120	1,421	1,021
SWEDEN	1,142	1,692	1,596	945	1,161	1,018	1,387
UNITED KINGDOM	5,717	2,266	2,780	6,686	15,762	21,539	26,214
EASTERN EUROPE	1,526	1,559	1,602	1,823	1,652	1,206	1,104
CZECHOSLOVAKIA	948	873	833	905	879	597	416
OTHER EUROPE	1,900	1,591	1,330	1,399	1,460	1,782	1,194
SPAIN	482	573	489	412	396	356	372
FINLAND	674	421	476	637	530	1,121	604
LATIN AMERICA	1,046	1,234	570	773	637	614	505
CACM	21	27	25	26	34	32	19
LAFTA	619	890	384	533	470	522	387
OTHER LATIN AMERICA	406	317	161	214	133	60	99
AFRICA	564	763	776	843	936	1,448	1,126
ASIA	1,253	858	515	769	618	915	741
OCEANIA	280	287	223	242	275	190	157
OTHER	14	22	16	7	7	14	11

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 4113 ANIMAL OILS, FATS, EXC. LARD							
WORLD	7,479	8,914	8,316	8,836	10,528	13,529	12,035
NORTH AMERICA	655	560	220	262	170	229	158
UNITED STATES	505	483	167	219	155	203	142
EUROPE	5,882	6,844	7,160	7,576	9,347	11,620	10,543
EEC	3,326	4,601	4,540	4,646	6,190	7,362	7,491
BELGIUM-LUXEMBOURG	134	154	89	198	152	192	210
FRANCE	207	161	197	147	190	158	131
GERMANY	1,627	2,794	2,494	2,641	3,689	4,306	4,186
ITALY	427	392	561	425	363	744	535
NETHERLANDS	931	1,100	1,199	1,235	1,796	1,962	2,429
EFTA	1,481	1,529	1,793	2,003	2,203	2,929	2,510
DENMARK	134	240	363	450	522	507	428
NORWAY	634	501	695	786	526	785	781
SWEDEN	379	235	319	242	171	388	148
SWITZERLAND	82	123	63	84	112	134	248
UNITED KINGDOM	188	384	310	403	834	1,075	867
EASTERN EUROPE	125	163	354	315	293	218	164
HUNGARY	24	36	102	121	145	165	149
OTHER EUROPE	950	551	473	612	661	1,111	378
IRELAND	165	175	93	162	239	156	64
SPAIN	247	136	162	250	240	197	78
FINLAND	516	206	166	180	167	750	225
LATIN AMERICA	321	775	217	184	132	129	113
CACM	2	9	3	4	8	5	1
LAFTA	253	661	191	125	84	100	45
COLOMBIA	128	541	111	27	8	11	2
OTHER LATIN AMERICA	66	105	23	55	40	24	67
AFRICA	203	416	563	633	745	1,299	1,022
UNION S. AFRICA	48	70	110	102	140	163	141
EGYPT	95	163	153	165	302	464	247
ASIA	358	216	122	160	107	218	174
OCEANIA	54	95	27	17	26	29	22
OTHER	6	8	7	4	1	5	3

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION,

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 421- FIXED VEGETABLE OILS, SOFT							
WORLD	15,359	28,523	24,455	19,847	21,363	20,585	23,977
NORTH AMERICA	1,663	1,831	1,374	535	445	1,379	640
UNITED STATES	540	473	410	444	392	760	489
CANADA	1,123	1,358	964	91	53	619	151
EUROPE	9,057	18,387	16,067	11,091	12,283	8,905	8,953
EEC	3,709	12,718	10,590	4,091	5,231	3,155	5,095
GERMANY	2,168	3,317	5,825	1,726	1,763	863	2,084
ITALY	711	6,571	1,180	128	100	691	312
NETHERLANDS	753	2,632	3,340	2,192	3,237	1,543	2,572
EFTA	4,073	4,449	3,731	3,963	3,932	3,784	2,902
AUSTRIA	342	864	568	397	682	546	103
NORWAY	441	937	665	93	154	93	406
SWEDEN	2,618	1,838	1,548	2,112	1,566	2,907	2,353
UNITED KINGDOM	283	635	388	943	1,015	8	5
EASTERN EUROPE	685	---	542	1,791	1,632	246	10
CZECHOSLOVAKIA	275	---	365	1,215	551	2	4
OTHER EUROPE	590	1,220	1,204	1,246	1,488	1,720	946
SPAIN	1	530	99	211	219	1,230	374
BRIT. AOC	520	635	776	974	975	438	528
LATIN AMERICA	955	2,668	1,556	1,226	1,651	2,488	4,518
CACM	---	---	---	---	---	---	---
LAFTA	827	2,519	1,403	866	1,310	2,167	4,013
BRAZIL	264	1,245	420	201	334	800	1,728
CHILE	362	438	343	459	575	907	1,100
ECUADOR	---	591	516	13	113	180	677
OTHER LATIN AMERICA	128	149	153	360	341	321	505
AFRICA	2,739	4,063	3,764	3,976	4,553	5,783	6,435
ANGOLA	1,749	1,929	1,989	2,476	2,310	2,757	3,139
MOZAMBIQUE	694	648	689	869	901	1,191	1,120
BR. AOC AFR. NES	2	448	124	326	324	151	705
ASIA	431	747	509	2,074	1,206	890	2,244
BURMA	3	12	1	1,425	20	3	462
CYPRUS	305	329	236	135	419	568	113
OCEANIA	495	809	1,158	930	1,207	1,115	1,161
AUSTRALIA	434	671	975	683	757	858	1,026
OTHER	19	18	27	15	18	25	26

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 422- OTHER FIXED VEGETABLE OILS							
WORLD	9,397	8,135	10,272	6,886	7,071	5,148	6,147
NORTH AMERICA	2,523	3,520	4,531	1,198	1,742	544	542
UNITED STATES	585	1,728	2,665	142	194	255	234
CANADA	1,938	1,792	1,866	1,056	1,548	289	308
EUROPE	3,902	2,208	3,543	3,678	2,758	2,092	3,068
EEC	578	476	956	1,247	530	652	832
FRANCE	30	6	133	115	136	137	148
GERMANY	369	229	565	550	158	204	172
ITALY	34	31	49	197	20	195	96
NETHERLANDS	78	171	154	308	107	62	379
EFTA	1,696	1,297	1,647	1,790	1,268	572	968
AUSTRIA	52	10	193	91	130	69	206
DENMARK	864	264	161	95	51	44	38
NORWAY	150	201	150	75	35	119	202
SWEDEN	445	578	884	986	850	210	366
UNITED KINGDOM	67	139	174	276	150	91	74
EASTERN EUROPE	992	65	401	42	47	397	609
GERMANY EAST	832	---	---	---	---	---	---
POLAND	101	2	214	---	---	372	603
OTHER EUROPE	636	370	539	599	913	471	659
IRELAND	226	150	234	288	641	270	291
SPAIN	63	46	103	115	105	103	173
LATIN AMERICA	717	428	199	299	195	212	169
CACM	14	23	17	25	13	18	14
LAFTA	393	162	49	141	44	51	23
OTHER LATIN AMERICA	310	243	133	133	138	143	132
BR. TERR. AM. NES	215	229	18	32	33	48	43
AFRICA	674	743	611	615	835	706	636
UNION S. AFRICA	183	205	84	80	119	133	62
GHANA	163	133	128	50	265	135	221
NIGERIA	88	84	75	102	136	144	89
ASIA	1,186	927	924	741	1,277	1,426	1,493
JAPAN	---	3	168	195	501	578	777
HONG KONG	173	156	91	104	101	73	38
PHILIPPINES	233	275	215	100	88	112	127
FED. SOUTH ARABIA	8	16	23	19	211	194	145
OCEANIA	374	285	448	337	250	160	228
AUSTRALIA	240	196	374	258	141	86	173
OTHER	21	24	16	18	14	8	11

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 431- OILS AND FATS, PROCESSED							
WORLD	28,193	26,598	33,877	39,604	47,620	47,111	37,237
NORTH AMERICA	1,244	950	661	498	712	890	802
UNITED STATES	1,116	801	514	323	433	724	654
EUROPE	22,173	20,520	27,144	12,832	38,445	37,707	28,458
EEC	5,470	5,376	6,037	4,175	7,659	6,232	6,348
FRANCE	1,809	1,522	1,738	800	2,387	1,623	990
GERMANY	1,593	1,469	1,294	1,585	2,677	2,442	1,790
ITALY	1,496	1,673	2,136	902	1,618	1,237	2,033
NETHERLANDS	305	552	594	521	681	640	1,274
EFTA	4,749	5,935	7,179	5,876	13,579	14,798	13,943
AUSTRIA	476	415	401	419	594	800	688
DENMARK	521	866	1,447	1,684	2,988	2,662	2,833
NORWAY	270	528	608	810	631	572	845
SWEDEN	1,334	1,252	1,206	1,223	1,442	1,435	1,694
SWITZERLAND	286	446	372	280	504	504	388
UNITED KINGDOM	1,773	2,317	3,007	1,289	7,244	8,634	7,316
EASTERN EUROPE	10,323	7,545	11,783	1,026	14,333	14,204	6,013
USSR	7,858	4,658	7,586	---	9,204	7,817	2,413
POLAND	805	938	872	261	2,216	2,868	1,291
CZECHOSLOVAKIA	1,203	1,380	2,402	75	1,367	1,536	920
HUNGARY	49	156	241	183	878	928	753
OTHER EUROPE	1,631	1,664	2,145	1,755	2,874	2,473	2,154
IRELAND	847	834	1,150	700	1,059	985	675
FINLAND	463	317	360	577	991	650	560
LATIN AMERICA	1,504	1,938	2,102	929	2,508	2,439	1,727
CACM	148	182	224	75	127	129	57
LAFTA	503	1,019	754	396	785	738	409
OTHER LATIN AMERICA	853	737	1,124	458	1,596	1,572	1,261
AFRICA	915	868	997	974	2,074	2,046	2,220
UNION S. AFRICA	212	225	280	445	502	491	577
ASIA	2,075	2,040	2,604	2,253	3,239	3,584	3,538
OCEANIA	273	268	339	531	626	444	477
OTHER	9	14	30	21,587	16	1	15

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 5511 ESSENTIAL OILS, ETC.							
WORLD	14,593	15,051	4,538	4,646	5,355	6,870	6,312
NORTH AMERICA	1,487	1,556	728	872	1,039	1,537	1,421
UNITED STATES	1,424	1,475	670	810	993	1,452	1,392
EUROPE	7,777	8,248	2,058	2,095	2,634	3,128	2,487
EEC	4,766	4,936	1,326	1,316	1,537	1,727	1,397
BELGIUM-LUXEMBOURG	217	210	137	45	53	115	169
FRANCE	786	798	241	296	392	524	370
GERMANY	2,722	2,860	620	676	841	735	526
ITALY	779	771	185	181	115	171	206
NETHERLANDS	262	297	143	118	136	182	126
EFTA	1,944	2,147	489	519	653	738	551
AUSTRIA	218	236	78	83	95	88	85
DENMARK	138	183	79	59	58	50	56
SWEDEN	551	557	83	61	81	84	81
SWITZERLAND	61	77	92	181	158	191	126
UNITED KINGDOM	791	906	123	105	236	297	156
EASTERN EUROPE	418	487	97	89	125	157	83
OTHER EUROPE	649	678	146	171	319	506	456
SPAIN	248	295	40	35	184	321	308
LATIN AMERICA	1,684	1,385	322	317	358	555	454
CACM	63	64	1	---	2	11	25
LAFTA	1,478	1,216	306	289	310	498	395
BRAZIL	82	111	48	62	64	173	165
MEXICO	670	414	186	109	178	144	102
OTHER LATIN AMERICA	143	105	15	28	46	46	34
AFRICA	889	1,044	537	464	480	670	849
UNION S. AFRICA	297	306	127	148	126	136	147
GHANA	101	182	201	128	140	90	222
NIGERIA	287	325	137	120	148	306	331
ASIA	2,225	2,226	511	583	555	696	822
JAPAN	884	1,002	311	248	293	351	371
PAKISTAN	261	268	27	42	43	34	42
INDIA	221	103	42	78	49	48	54
THAILAND	217	214	55	49	60	101	68
OCEANIA	530	582	376	312	282	282	276
AUSTRALIA	443	513	318	238	231	217	210
OTHER	1	10	6	3	7	2	3
OTHER AFRICA	1,102	1,139	1,091	1,232	1,386	1,398	1,439

TABLE 7--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, VALUE BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			1,000 DOLLARS				
SITC 5995 STARCHES, ETC.							
WORLD	23,714	26,450	18,309	20,546	21,162	22,440	23,219
NORTH AMERICA	2,689	3,506	2,684	3,290	2,802	3,433	4,608
UNITED STATES	2,118	2,899	1,988	2,318	1,906	2,296	3,589
CANADA	571	607	696	972	896	1,137	1,019
EUROPE	14,817	16,553	10,408	11,616	12,914	13,128	12,567
EEC	6,874	7,822	3,006	3,141	3,546	3,624	3,773
BELGIUM-LUXEMBOURG	642	728	484	724	647	652	602
FRANCE	949	1,342	683	667	728	743	954
GERMANY	3,195	3,520	752	867	1,194	859	663
ITALY	1,409	1,579	666	569	620	831	744
NETHERLANDS	679	653	421	314	357	539	810
EFTA	4,952	4,922	4,193	4,837	4,997	4,930	5,391
AUSTRIA	578	601	333	443	390	514	713
DENMARK	644	726	766	829	851	895	941
NORWAY	660	720	791	805	743	790	807
SWEDEN	775	884	546	730	880	756	1,135
SWITZERLAND	333	493	558	745	844	1,027	772
UNITED KINGDOM	1,705	1,257	1,040	1,099	1,081	739	740
EASTERN EUROPE	679	1,160	823	973	1,281	1,154	804
POLAND	169	361	211	190	204	300	144
ROMANIA	55	146	300	444	307	262	262
OTHER EUROPE	2,312	2,649	2,386	2,665	3,090	3,420	2,599
IRELAND	679	679	568	648	846	1,127	1,086
SPAIN	277	169	125	193	230	318	277
FINLAND	1,002	1,350	1,386	1,522	1,743	1,705	1,047
LATIN AMERICA	1,595	1,798	1,007	1,290	913	951	899
CACM	35	23	17	23	35	29	29
LAFTA	1,337	1,587	783	1,005	675	696	659
PERU	329	349	262	311	332	243	193
OTHER LATIN AMERICA	223	188	207	262	203	226	211
AFRICA	1,102	1,139	1,091	1,232	1,386	1,398	1,439
UNION S. AFRICA	301	313	219	217	237	191	227
NIGERIA	151	160	216	244	273	306	224
ASIA	2,188	2,274	1,669	1,823	1,689	2,199	2,144
JAPAN	345	161	56	46	185	262	708
INDIA	216	207	162	239	250	278	267
OCEANIA	1,310	1,164	1,423	1,291	1,445	1,327	1,552
AUSTRALIA	869	802	735	730	766	668	815
NEW ZEALAND	435	357	680	553	668	647	727
OTHER	13	16	27	4	13	4	10

TABLE 8

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
TOTAL AGRICULTURE			NOT AVAILABLE				
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 001- LIVE ANIMALS							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 011- MEAT (F, C, F)							
WORLD	192,679	247,743	321,398	306,250	312,114	317,574	344,853
NORTH AMERICA	257	435	1,724	256	2,245	6,035	1,519
EUROPE	183,561	237,058	291,029	280,785	289,233	284,755	300,713
EEC	105,371	115,004	191,485	166,342	155,091	178,334	169,402
BELGIUM-LUXEMBOURG	3,115	2,504	6,506	6,426	6,252	5,011	8,798
FRANCE	17,183	7,168	33,560	33,246	26,186	41,909	32,199
GERMANY	77,599	80,048	70,944	52,080	40,969	39,463	26,385
ITALY	6,648	23,866	78,697	68,601	73,947	84,643	95,429
NETHERLANDS	826	1,418	1,778	5,989	7,737	7,308	6,591
EFTA	49,025	54,164	59,886	76,478	78,300	72,139	90,340
AUSTRIA	1,117	1,572	1,702	2,762	5,902	9,015	7,615
SWEDEN	22,843	10,022	7,814	12,536	11,910	9,966	13,230
SWITZERLAND	5,926	18,354	21,807	25,323	16,781	21,283	19,107
UNITED KINGDOM	18,001	22,901	26,928	31,458	37,271	24,508	34,926
EASTERN EUROPE	18,557	52,768	27,948	34,828	40,786	15,270	26,957
USSR	13	3,196	10	19,335	10,262	18	11
GERMANY EAST	8,592	42,618	21,057	14,932	21,910	10,534	19,163
CZECHOSLOVAKIA	9,927	6,773	6,241	---	37	1,861	---
OTHER EUROPE	10,608	15,122	11,710	3,137	15,056	19,012	14,014
SPAIN	273	12,748	9,424	583	10,030	6,465	7,457
FINLAND	9,516	1,524	641	739	1,655	8,462	881
LATIN AMERICA	1,903	3,855	7,071	2,989	8,977	6,992	6,748
CACM	---	---	---	---	7	22	---
LAFTA	1,199	3,079	5,967	1,564	6,064	3,451	3,382
VENEZUELA	1,185	3,031	5,958	1,556	3,844	3,437	3,379
OTHER LATIN AMERICA	704	776	1,104	1,425	2,906	3,519	3,366
AFRICA	2,261	2,448	2,467	2,192	3,652	2,600	3,097
ASIA	4,547	3,791	18,860	19,730	7,706	16,953	28,925
JAPAN	1	6	14,538	14,407	759	8,068	13,830
OCEANIA	118	136	226	272	279	221	260
OTHER	32	20	21	26	22	18	3,591

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0111 MEAT OF BOVINE ANIMALS (F, C, F)							
WORLD		90,897	123,047	88,621	91,648	117,075	146,194
NORTH AMERICA	39	21	681	196	2	97	1,239
EUROPE	49,830	89,056	120,336	86,940	90,312	115,444	140,942
EEC	18,594	35,931	82,369	73,242	76,445	86,144	96,516
FRANCE	691	2,681	2,426	5,570	6,261	9,171	6,545
GERMANY	13,993	14,299	13,027	6,342	6,382	6,336	6,577
ITALY	3,888	18,765	66,668	59,460	61,949	64,960	74,596
NETHERLANDS	18	148	178	913	1,098	5,374	4,622
EFTA	20,356	13,833	11,105	9,799	7,830	10,975	18,983
NORWAY	629	550	437	566	609	1,871	2,117
SWEDEN	17,359	6,597	3,256	3,629	2,122	1,864	3,964
SWITZERLAND	1,117	2,089	1,253	3,962	4,687	4,767	5,758
UNITED KINGDOM	1,226	4,496	6,131	1,455	364	1,216	1,860
EASTERN EUROPE	2,739	25,474	17,145	3,631	4,776	10,280	19,196
GERMANY EAST	916	21,320	12,348	3,172	3,866	9,504	18,663
CZECHOSLOVAKIA	1,817	876	4,181	---	---	---	---
OTHER EUROPE	8,141	13,818	9,717	268	1,261	8,045	6,247
SPAIN	166	12,631	9,155	34	55	107	4,553
FINLAND	7,734	989	2	1	836	7,162	254
LATIN AMERICA	135	161	207	93	68	114	148
CACM	---	---	---	---	---	---	---
LAFTA	3	8	---	2	5	---	1
OTHER LATIN AMERICA	132	153	207	91	63	114	147
AFRICA	604	709	832	746	601	648	604
ASIA	757	945	990	639	657	762	821
OCEANIA	3	---	---	2	---	3	---
OTHER		5	1	5	8	7	2,440

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0113 MEAT OF SWINE (F, C, F)							
WORLD	51	60,387	76,211	94,017	114,822	96,421	80,064
NORTH AMERICA	---	22	905	41	2,174	5,920	252
CANADA	48,900	---	828	15	1,565	4,974	252
EUROPE	19,167	56,264	68,283	90,609	102,947	83,597	69,578
EEC	1,507	10,269	40,235	36,255	38,829	49,621	37,585
BELGIUM-LUXEMBOURG	13,897	638	4,008	2,562	3,364	2,194	1,781
FRANCE	2,181	953	24,038	19,065	14,216	22,832	15,247
GERMANY	1,549	4,340	1,422	3,058	5,851	5,885	929
ITALY	33	4,200	10,602	8,238	10,532	18,419	19,515
NETHERLANDS	12,563	138	165	3,332	4,866	291	113
EFTA	120	18,255	16,457	25,782	19,350	25,066	23,102
AUSTRIA	135	170	303	1,037	2,359	4,331	1,773
NORWAY	---	299	746	2,491	1,435	2,774	3,541
PORTUGAL	3,043	1	---	698	3,794	723	3,804
SWEDEN	2,520	1,828	3,079	6,521	6,777	5,739	6,391
SWITZERLAND	6,723	10,485	11,351	13,785	3,354	9,482	6,181
UNITED KINGDOM	15,433	5,454	978	1,237	1,626	2,000	1,412
EASTERN EUROPE	4	27,125	10,676	27,579	36,001	4,964	7,756
USSR	7,365	6	1	15,724	10,250	3	1
GERMANY EAST	8,039	21,135	8,589	11,760	18,044	1,030	500
CZECHOSLOVAKIA	25	5,892	2,060	---	37	1,843	---
HUNGARY	1,737	91	25	95	6,399	984	3,266
OTHER EUROPE	22	615	915	993	8,767	3,946	1,135
SPAIN	1,627	21	40	12	7,545	2,911	141
FINLAND	1,333	519	639	710	800	801	565
LATIN AMERICA	---	3,122	6,321	2,282	7,803	5,102	5,122
CACM	1,167	---	---	---	---	---	---
LAFTA	1,167	3,008	5,953	1,556	5,962	3,427	3,379
VENEZUELA	166	3,008	5,953	1,556	3,829	3,427	3,379
OTHER LATIN AMERICA	148	114	368	726	1,841	1,675	1,743
AFRICA	1,422	186	198	351	753	703	379
ASIA	9	782	473	725	1,141	1,086	4,027
OCEANIA		9	28	4	1	10	5
OTHER		2	3	5	3	3	701

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0114 POULTRY (F, C, F)							
WORLD		52,788	52,603	55,879	50,816	44,398	48,201
NORTH AMERICA	38	10	12	2	12	9	10
EUROPE	48,742	50,841	49,754	51,188	43,128	36,113	33,746
EEC	43,675	41,822	38,775	29,258	14,635	11,359	5,419
GERMANY	42,360	40,759	38,136	28,969	13,795	10,523	4,517
ITALY	901	517	435	184	416	410	274
EFTA	4,713	8,578	10,134	16,599	23,645	18,308	22,097
AUSTRIA	942	1,395	1,297	1,512	3,459	4,561	5,637
SWITZERLAND	1,163	4,247	7,276	5,526	6,813	5,321	5,412
UNITED KINGDOM	2,022	2,764	1,450	8,751	12,485	7,924	10,402
EASTERN EUROPE	1	3	2	3,601	3	5	3
USSR	1	---	1	3,601	2	5	3
OTHER EUROPE	353	438	843	1,730	4,845	6,441	6,227
GREECE	8	8	257	683	1,930	2,432	3,163
SPAIN	57	69	142	478	2,375	3,349	2,620
LATIN AMERICA	18	46	38	15	173	69	145
CACM	---	---	---	---	---	---	---
LAFTA	13	37	9	6	82	14	2
OTHER LATIN AMERICA	5	9	29	9	91	55	143
AFRICA	434	500	534	772	2,025	982	1,511
ASIA	1,252	1,262	2,068	3,635	5,202	7,034	12,172
JAPAN	1	---	62	439	754	807	2,698
MALAYSIA INC. SINGAP	261	407	657	845	1,282	---	---
SAUDI ARABIA	32	41	116	251	754	1,341	1,532
KUWAIT	231	207	314	703	787	1,118	2,446
BAHRAIN	77	93	255	553	801	780	1,369
OCEANIA	74	123	190	259	271	193	248
OTHER		6	7	8	5	-2	369

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 012- MEAT DRIED, SALTED, ETC.							
WORLD	302,233	313,927	305,279	315,718	328,444	326,112	327,371
NORTH AMERICA	1,586	1,017	30	18	238	4	35
EUROPE	291,915	305,230	298,998	309,639	322,982	320,615	320,316
EEC	1,345	1,567	2,355	3,102	2,784	3,196	2,023
EFTA	290,069	303,049	295,839	305,702	319,407	316,585	317,455
UNITED KINGDOM	289,222	302,073	294,442	304,115	317,329	314,617	315,171
EASTERN EUROPE	7	5	10	10	22	14	10
OTHER EUROPE	494	609	794	825	769	820	828
LATIN AMERICA	2,838	2,938	2,532	2,795	2,350	2,182	1,562
CACM	3	4	7	3	1	2	---
LAFTA	765	918	280	1,061	326	342	10
OTHER LATIN AMERICA	2,070	2,016	2,245	1,731	2,023	1,838	1,552
AFRICA	4,667	3,668	2,612	1,849	1,405	1,728	2,950
ASIA	1,195	1,055	1,059	1,238	1,150	1,311	1,438
OCEANIA	29	17	39	165	316	255	459
OTHER	3	2	9	14	3	17	611

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
				METRIC TON			
SITC 013- MEAT CANNED, ETC.							
WORLD	94,932	100,621	118,605	119,872	143,991	170,422	165,652
NORTH AMERICA	30,178	36,230	42,477	39,400	56,249	73,970	64,171
UNITED STATES	28,930	35,661	41,828	38,608	54,187	69,675	58,991
CANADA	1,248	569	649	792	2,062	4,295	5,180
EUROPE	53,135	54,433	62,698	61,745	68,567	75,686	75,264
EEC	5,294	6,151	10,078	9,163	10,740	12,942	11,465
GERMANY	2,903	3,736	6,230	5,739	6,651	7,726	6,363
ITALY	803	593	2,081	1,494	1,712	2,293	2,278
EFTA	45,936	45,994	48,804	48,539	52,846	56,751	57,520
SWEDEN	1,254	617	1,474	2,164	2,638	2,591	2,664
UNITED KINGDOM	44,057	44,708	46,667	45,913	49,576	53,204	53,869
EASTERN EUROPE	83	166	157	4	236	339	357
OTHER EUROPE	1,822	2,122	3,659	4,039	4,745	5,654	5,922
SPAIN	464	800	1,692	1,680	2,045	2,968	2,765
LATIN AMERICA	3,642	3,045	3,828	5,069	5,346	6,307	7,216
CACM	48	32	38	32	51	40	56
LAFTA	1,117	364	340	298	554	782	1,271
OTHER LATIN AMERICA	2,477	2,649	3,450	4,739	4,741	5,485	5,889
BR. TERR. AM. NES	1,445	1,483	1,025	1,197	1,424	1,795	1,984
AFRICA	2,826	2,088	3,068	2,869	2,996	2,848	3,465
ASIA	4,627	4,508	5,678	6,661	7,107	7,231	8,861
OCEANIA	500	275	835	2,712	3,696	4,353	6,123
U.S. DEP. OCEANIA	289	64	578	2,349	3,394	4,096	5,838
OTHER	24	42	21	1,416	30	27	552

TABLE 3 CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 022- MILK AND CREAM							
WORLD	204,342	219,577	217,573	208,862	217,880	222,742	226,018
NORTH AMERICA	919	562	505	630	903	1,171	1,473
EUROPE	96,665	113,184	114,981	106,618	105,389	106,484	74,716
EEC	71,904	72,965	70,291	61,933	61,401	63,525	30,957
FRANCE	4,065	3,430	3,830	5,497	2,828	2,646	2,171
GERMANY	58,515	59,223	53,896	49,495	43,773	38,772	12,404
ITALY	5,270	7,725	6,113	5,071	6,021	6,481	7,801
NETHERLANDS	4,016	1,565	4,907	1,821	8,265	15,215	8,485
EFTA	22,288	34,821	35,685	34,476	32,251	35,509	35,003
DENMARK	1,979	1,915	3,269	878	1,963	7,600	5,332
SWITZERLAND	2,032	11,248	5,659	2,525	2,746	2,950	4,780
UNITED KINGDOM	17,987	21,537	26,569	30,819	26,950	24,504	23,856
EASTERN EUROPE	479	663	1,913	4,862	4,866	1,624	888
OTHER EUROPE	1,994	4,735	7,092	5,347	6,871	5,826	7,868
BRIT. AOC	1,540	2,320	3,496	3,964	3,582	2,313	3,798
LATIN AMERICA	22,182	26,673	21,835	22,074	23,359	19,098	19,680
CACM	2,324	2,572	3,461	3,226	2,806	3,384	3,248
LAFTA	12,564	16,844	9,098	9,538	10,709	6,159	6,716
VENEZUELA	10,619	8,974	7,917	8,896	8,484	3,201	4,348
OTHER LATIN AMERICA	7,294	7,257	9,276	9,310	9,844	9,555	9,716
BR. TERR. AM. NES	5,886	6,057	3,452	3,565	3,861	3,734	3,678
AFRICA	13,117	10,494	12,627	14,366	21,521	22,399	24,756
GHANA	991	950	1,145	2,025	5,716	7,082	7,102
NIGERIA	1,197	1,564	1,859	2,793	3,201	3,315	3,071
ASIA	71,400	68,544	67,516	65,073	66,635	73,462	75,820
INDIA	2,255	2,986	201	958	1,148	9,520	9,091
CEYLON	3,984	4,172	7,408	6,286	3,315	6,867	5,861
THAILAND	8,736	10,695	9,568	9,320	10,494	9,002	8,496
MALAYSIA INC. SINGAP	36,152	29,248	31,268	26,895	26,267	---	---
MALAYSIA	---	---	---	---	---	16,214	10,747
INDONESIA	6,527	2,449	2,240	1,224	397	1,102	1,495
PHILIPPINES	3,096	7,666	6,169	7,753	6,746	9,188	10,934
OCEANIA	52	98	73	81	57	96	101
OTHER	7	22	36	20	16	32	29,472

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 023- BUTTER							
WORLD	138,474	141,165	121,645	123,428	133,535	127,181	119,959
NORTH AMERICA	120	262	80	122	327	114	192
EUROPE	129,318	135,634	117,248	120,223	128,448	123,107	114,884
EEC	15,630	22,047	13,670	5,415	7,298	8,020	5,241
GERMANY	13,724	15,407	8,548	3,742	4,285	5,594	2,430
ITALY	1,734	6,433	3,353	1,338	2,366	1,122	993
EFTA	107,103	111,577	102,320	108,873	117,125	114,907	107,014
SWITZERLAND	4,412	2,682	1,401	7,412	4,026	3,366	254
UNITED KINGDOM	101,566	107,673	100,217	100,945	111,840	111,114	106,731
EASTERN EUROPE	6,470	1,850	1,157	5,835	3,907	53	2,487
OTHER EUROPE	115	160	101	100	118	127	142
LATIN AMERICA	2,834	1,474	1,382	1,164	1,092	1,108	1,082
CACM	5	4	3	2	3	4	2
LAFTA	1,577	416	282	96	161	150	134
OTHER LATIN AMERICA	1,252	1,054	1,097	1,066	928	954	946
AFRICA	3,805	2,106	1,418	679	1,672	592	491
ASIA	2,390	1,687	1,513	1,241	1,996	2,257	2,059
OCEANIA	---	---	---	---	---	---	2
OTHER	7	2	4	-1	---	3	1,249

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 024- CHEESE AND CURD							
WORLD	134,786	139,653	145,470	146,694	140,393	151,863	156,800
NORTH AMERICA	13,665	13,236	13,796	13,989	15,493	23,768	26,876
UNITED STATES	10,748	10,596	11,123	11,242	12,043	20,108	22,522
CANADA	2,917	2,640	2,673	2,747	3,450	3,660	4,354
EUROPE	111,843	118,207	122,430	122,254	114,082	114,055	114,650
EEC	84,643	88,552	93,274	90,806	81,979	85,765	84,421
BELGIUM-LUXEMBOURG	4,591	4,689	4,713	4,992	4,864	5,358	5,274
FRANCE	6,244	6,136	7,199	7,042	9,775	10,004	9,949
GERMANY	46,657	48,251	49,228	51,631	41,592	43,355	42,180
ITALY	26,776	29,062	31,619	26,537	25,176	26,412	26,176
EFTA	21,693	21,404	23,368	24,315	24,153	23,742	24,555
SWEDEN	4,317	4,852	5,119	5,422	5,634	5,606	5,742
SWITZERLAND	896	1,110	1,755	2,001	1,928	1,311	1,334
UNITED KINGDOM	15,002	13,842	14,909	15,122	14,759	15,055	15,912
EASTERN EUROPE	4,715	7,332	4,489	5,997	5,498	2,083	4,190
USSR	---	4,001	1,877	3,000	3,002	2	1,996
GERMANY EAST	4,646	3,100	2,432	2,695	2,243	1,785	1,716
OTHER EUROPE	792	919	1,299	1,136	2,452	2,465	1,484
LATIN AMERICA	4,024	2,633	2,196	2,176	1,093	1,100	1,216
CACM	30	35	44	38	33	30	37
LAFTA	3,745	2,322	1,827	1,376	399	358	380
OTHER LATIN AMERICA	249	276	325	762	661	712	799
AFRICA	2,791	2,094	2,411	2,641	2,792	2,649	2,356
ASIA	1,672	2,484	3,562	4,495	5,567	8,745	9,748
JAPAN	236	1,220	2,175	2,608	3,804	7,260	8,158
OCEANIA	777	984	1,063	1,136	1,371	1,534	1,508
OTHER	14	15	12	3	-5	12	446

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 025- EGGS							
WORLD	72,893	55,932	50,793	43,573	37,666	46,959	40,297
NORTH AMERICA	5	17	6	673	395	7,710	1,321
UNITED STATES	1	17	1	399	10	5,313	362
CANADA	4	---	5	274	385	2,397	959
EUROPE	71,201	54,750	49,990	39,649	35,306	38,002	24,706
EEC	57,770	44,191	34,740	27,039	23,962	24,230	9,238
FRANCE	906	582	583	698	768	999	317
GERMANY	55,619	42,674	32,270	23,206	19,067	17,791	5,013
ITALY	1,229	918	1,883	3,034	1,850	2,014	992
NETHERLANDS	---	5	1	98	2,218	2,938	2,768
EFTA	13,205	10,223	13,978	10,642	10,535	12,892	13,554
AUSTRIA	391	190	477	811	773	723	788
DENMARK	2	---	461	77	1,945	2,999	1,951
NORWAY	1,216	1,129	1,650	1,174	896	367	429
SWEDEN	1,098	1,062	120	283	206	325	569
SWITZERLAND	3,590	3,239	4,081	3,209	3,410	3,636	2,928
UNITED KINGDOM	6,907	4,602	7,188	5,083	3,300	4,833	6,884
EASTERN EUROPE	1	222	908	1,626	1	516	1,533
OTHER EUROPE	225	114	364	342	808	364	381
LATIN AMERICA	587	6	14	1,908	1,324	62	95
CACM	---	---	---	---	---	---	---
LAFTA	582	4	---	1,860	1,265	21	53
OTHER LATIN AMERICA	5	2	14	48	59	41	42
AFRICA	475	267	96	64	222	300	453
ASIA	611	879	675	1,279	412	848	3,072
OCEANIA	1	2	---	---	---	33	13
OTHER	13	11	12	---	7	4	10,637

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 041- WHEAT, UNMILLED							
WORLD	298,923	238,129	451,234	227,000	434,623	229,451	285,266
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	168,939	238,131	449,394	223,000	431,585	229,445	269,982
EEC	22,691	114,713	216,275	123,000	83,720	32,195	117,989
FRANCE	140,133	3	31,086	---	1	204	21
GERMANY	6,031	113,598	141,350	114,000	78,385	30,451	105,791
NETHERLANDS	42,958	1,103	43,075	9,000	5,238	1,142	12,098
EFTA	13,779	47,860	96,117	38,000	114,354	138,335	135,176
DENMARK	15,000	6,185	7,401	1,000	3,427	440	20,055
NORWAY	4,057	6,916	11,359	35,000	81,596	62,895	73,358
SWITZERLAND	184	34,577	1,791	2,000	11	2,291	18,829
UNITED KINGDOM	74,181	139	68,014	---	29,296	72,502	22,931
EASTERN EUROPE	---	73,339	119,587	59,000	226,505	55,319	10,466
GERMANY EAST	30,012	---	240	---	---	29,342	5,144
POLAND	2,246	20,223	114,587	49,000	203,762	25,963	5
CZECHOSLOVAKIA	---	2,802	---	---	22,693	8	---
HUNGARY	41,923	18,643	4,760	10,000	---	---	5,317
YUGOSLAVIA	12,845	19,202	---	---	---	---	---
OTHER EUROPE	---	2,219	17,415	3,000	7,006	3,595	6,351
LATIN AMERICA	---	---	---	---	---	---	1
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	1,833	---	2,009	---	1
ASIA	---	---	6	6,000	1,028	9	14,986
OCEANIA	---	---	---	---	---	---	297
OTHER		-2	1	-2,000	1	-3	---

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 042- RICE							
WORLD		243	375				
NORTH AMERICA	---	---	---	---	---	1	---
EUROPE	160	217	339	551	398	1,363	1,231
EEC	101	58	75	139	67	657	395
BELGIUM-LUXEMBOURG	79	---	---	---	---	451	---
FRANCE	17	25	31	26	28	50	149
GERMANY	5	30	44	34	38	83	184
ITALY	---	---	---	79	1	58	56
NETHERLANDS	---	3	---	---	---	15	6
EFTA	49	156	253	405	296	366	782
AUSTRIA	4	97	235	395	263	337	690
DENMARK	2	---	---	1	26	---	3
NORWAY	17	7	12	8	6	9	18
SWEDEN	26	52	6	1	1	10	3
SWITZERLAND	---	---	---	---	---	---	67
UNITED KINGDOM	---	---	---	---	---	10	1
EASTERN EUROPE	---	---	---	---	2	320	21
USSR	---	---	---	---	2	16	12
GERMANY EAST	---	---	---	---	---	300	---
ROMANIA	---	---	---	---	---	3	4
OTHER EUROPE	10	3	11	7	33	20	33
FINLAND	10	3	11	7	32	16	28
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	19	19	28	620	2,851	---	2
ANGOLA	19	19	28	620	2,851	---	---
ASIA	3	3	4	3	5	---	11
JAPAN	3	3	4	2	---	---	---
INDIA	---	---	---	1	5	---	6
OCEANIA	---	---	---	---	---	---	---
OTHER		4	4				

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 043- BARLEY, UNMILLED							
WORLD	299,199	530,902	337,026	333,509	633,926	1,235,260	1,295,477
NORTH AMERICA	3,957	2,495	1,191	2,019	1,016	---	2
EUROPE	281,125	504,236	311,509	309,126	619,481	1,194,985	1,274,239
EEC	185,995	397,310	197,007	251,945	492,859	567,002	708,387
BELGIUM-LUXEMBOURG	28,827	57,484	8,059	4,288	43,656	83,067	86,422
GERMANY	115,092	245,395	138,376	217,353	379,959	319,871	458,340
ITALY	4,988	9,726	11,567	9,005	21,351	107,248	99,440
NETHERLANDS	36,870	83,762	38,138	20,804	47,428	55,482	61,066
EFTA	86,306	67,905	81,106	49,548	54,096	228,986	209,198
DENMARK	65,209	43,446	48,136	25,034	27,596	194,715	170,703
NORWAY	15,604	13,588	22,220	14,481	10,232	20,393	30,734
EASTERN EUROPE	1,145	26,836	12,160	1,232	49,688	80,169	157,472
GERMANY EAST	---	6,471	---	---	---	57,654	75,874
POLAND	1,145	20,365	11,583	731	721	22,078	61,657
CZECHOSLOVAKIA	---	---	561	---	48,481	415	19,895
OTHER EUROPE	7,679	12,185	21,236	6,401	22,838	318,828	199,182
SPAIN	879	114	8,051	---	4,480	286,452	178,429
FINLAND	1,057	4,884	8,197	5,790	11,087	8,960	9,393
LATIN AMERICA	12,986	17,279	18,094	11,336	5,504	8,997	9,514
CACM	---	---	---	---	---	---	---
LAFTA	12,977	17,279	18,087	11,325	5,501	8,997	9,513
BRAZIL	8,976	13,213	9,912	11,325	5,501	8,996	3,993
OTHER LATIN AMERICA	9	---	7	11	3	---	1
AFRICA	814	6,883	6,192	11,020	7,926	28,967	51
ASIA	317	8	39	3	1	2,307	11,674
OCEANIA	---	---	1	1	---	---	---
OTHER	---	1	---	4	-2	4	-3

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 044- MAIZE (CORN), UNMILLED							
WORLD		2,061	3,054				
NORTH AMERICA	1	1	1	---	---	---	7
EUROPE	2,266	2,056	3,052	2,000	3,395	976	2,680
EEC	1,685	1,754	1,691	2,000	3,036	807	1,617
GERMANY	1,632	1,637	1,685	2,000	2,099	793	1,614
ITALY	43	67	6	---	---	12	3
NETHERLANDS	---	50	---	---	932	---	---
EFTA	132	183	1,359	---	357	157	1,028
DENMARK	2	1	---	---	25	31	627
SWEDEN	19	177	1,357	---	332	125	381
UNITED KINGDOM	96	---	---	---	---	---	---
EASTERN EUROPE	443	119	1	---	---	10	21
CZECHOSLOVAKIA	386	119	---	---	---	---	---
HUNGARY	50	---	1	---	---	3	10
OTHER EUROPE	6	---	1	---	2	2	14
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	2	1	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		2	---				

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 045- CEREALS, UNMILLED, NES							
WORLD	258,872	288,795	208,293	95,069	156,631	191,870	180,832
NORTH AMERICA	51	18	6	2	1	1	2
EUROPE	257,042	288,246	207,990	94,637	156,325	191,758	180,711
EEC	165,349	216,609	135,349	48,751	79,368	121,670	154,664
BELGIUM-LUXEMBOURG	3,898	23,401	3,995	27	558	2,615	48
FRANCE	7,920	28,274	3,227	60	3,695	755	136
GERMANY	63,553	69,846	25,747	37,578	58,456	97,764	140,231
ITALY	703	9,662	1,636	822	580	2,678	5,872
NETHERLANDS	89,275	85,426	100,744	10,264	16,079	17,858	8,377
EFTA	24,427	33,071	24,637	9,835	36,588	41,107	19,526
DENMARK	17,582	21,498	13,354	3,026	16,571	22,233	3,750
NORWAY	1,804	1,178	5,292	2,316	13,258	4,151	10,207
SWITZERLAND	2,672	4,736	5,729	4,049	4,424	4,105	4,444
EASTERN EUROPE	47,445	18,909	17,749	9,839	11,321	16,489	---
POLAND	47,416	18,908	14,744	9,480	9,218	3,697	---
OTHER EUROPE	19,821	19,657	30,255	26,212	29,048	12,492	6,521
IRELAND	19,665	18,340	13,731	9,533	13,579	11,558	5,622
FINLAND	9	1,268	16,411	16,533	15,279	597	109
LATIN AMERICA	1,669	395	193	258	185	27	30
CACM	---	---	---	---	---	---	---
LAFTA	1,208	22	2	8	25	17	13
OTHER LATIN AMERICA	461	373	191	250	160	10	17
AFRICA	105	130	88	132	86	81	80
ASIA	3	1	7	19	---	2	9
OCEANIA	---	3	8	17	32	---	1
OTHER	2	2	1	4	2	1	-1

TABLE 3 CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0451 RYE, UNMILLED							
WORLD		140,977	121,736				
NORTH AMERICA	50	---	6	---	---	---	---
EUROPE	75,671	140,962	121,623	3,166	13,420	17,322	2,747
EEC	26,546	105,799	93,471	1,967	12,332	13,564	1,373
BELGIUM-LUXEMBOURG	---	23,366	3,418	---	---	1,984	---
FRANCE	1	1,373	2,261	---	---	---	---
GERMANY	4,107	4,895	959	---	---	2,113	1,343
ITALY	52	9,240	152	91	30	45	30
NETHERLANDS	22,386	66,925	86,681	1,876	12,302	9,422	---
EFTA	1,705	16,179	5,879	1,177	1,060	3,108	1,358
AUSTRIA	---	---	---	---	---	2,958	---
DENMARK	974	10,104	5,264	1,123	1,004	2	645
PORTUGAL	---	5,100	2	---	---	---	---
EASTERN EUROPE	47,416	18,908	10,559	---	---	644	---
GERMANY EAST	---	---	3,000	---	---	---	---
POLAND	47,416	18,908	7,559	---	---	---	---
OTHER EUROPE	4	76	11,714	22	28	6	16
IRELAND	---	76	8,686	2	---	4	5
FINLAND	2	---	3,008	10	26	---	5
LATIN AMERICA	---	---	56	---	---	---	10
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	10
OTHER LATIN AMERICA	---	---	56	---	---	---	---
AFRICA	---	15	35	6	---	---	---
ASIA	---	1	7	---	---	---	---
OCEANIA	---	---	8	---	---	---	1
OTHER		-1	1				

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0452 OATS, UNMILLED							
WORLD	164,284	137,790	86,260				
NORTH AMERICA	---	15	---	---	---	---	---
EUROPE	162,612	137,382	86,124	87,234	141,337	172,874	161,110
EEC	124,347	106,699	41,878	45,390	66,934	107,029	136,900
FRANCE	141	26,885	966	57	3,694	755	121
GERMANY	56,275	60,857	24,788	37,553	58,456	95,636	130,083
ITALY	636	422	1,484	731	550	2,633	657
NETHERLANDS	66,671	18,500	14,063	7,023	3,681	7,377	5,998
EFTA	21,961	15,387	18,536	8,392	35,235	37,648	17,901
AUSTRIA	325	---	---	---	2,208	6,427	390
DENMARK	16,023	10,063	8,090	1,901	15,567	22,231	3,104
NORWAY	1,396	199	5,033	2,080	12,982	3,850	9,363
SWITZERLAND	2,192	4,641	5,234	4,029	4,421	4,020	4,409
EASTERN EUROPE	28	---	7,190	9,839	11,321	15,845	---
GERMANY EAST	---	---	---	275	---	8,070	---
POLAND	---	---	7,185	9,480	9,218	3,697	---
CZECHOSLOVAKIA	---	---	---	---	---	3,998	---
OTHER EUROPE	16,276	15,296	18,520	23,613	27,847	12,352	6,309
IRELAND	16,144	15,255	5,045	7,040	12,959	11,483	5,467
FINLAND	---	---	13,395	16,463	14,781	576	100
LATIN AMERICA	1,653	373	135	181	68	---	---
CACM	---	---	---	---	---	---	---
LAFTA	1,199	---	---	---	---	---	---
OTHER LATIN AMERICA	454	373	135	181	68	---	---
AFRICA	15	21	2	1	8	---	3
ASIA	1	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER	3	-1	-1				

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 046- MEAL AND FLOUR OF WHEAT							
WORLD	6,863	7,799	7,646	13,051	8,943	24,617	17,860
NORTH AMERICA	3	18	45	7	5	2	1
EUROPE	4,287	4,432	4,529	9,882	5,449	20,839	5,860
EEC	1,370	1,298	1,183	1,025	1,047	1,257	1,394
GERMANY	555	735	639	633	614	721	789
NETHERLANDS	540	413	428	276	316	226	413
EFTA	1,481	2,294	2,168	2,590	2,747	2,065	2,031
DENMARK	1,238	1,414	1,852	1,701	1,865	1,830	1,687
NORWAY	159	599	134	129	45	101	222
SWEDEN	73	84	113	745	829	127	88
EASTERN EUROPE	5	11	3	4,771	4	15,764	23
USSR	2	8	---	4,769	3	33	16
GERMANY EAST	---	---	---	---	---	2,550	---
POLAND	2	1	2	---	---	13,179	2
OTHER EUROPE	1,431	829	1,175	1,496	1,651	1,753	2,412
IRELAND	672	338	582	231	129	221	683
BRIT. AOC	595	319	360	1,060	1,291	1,366	1,505
LATIN AMERICA	75	38	143	453	319	384	347
CACM	---	---	---	---	---	---	---
LAFTA	---	1	1	---	32	---	---
OTHER LATIN AMERICA	75	37	142	453	287	384	347
TRINIDAD TOBAGO	---	---	2	398	230	366	313
AFRICA	1,066	1,476	941	1,249	1,578	2,015	1,554
UNION S. AFRICA	---	1	11	173	220	292	317
EGYPT	3	---	6	4	5	839	346
GHANA	53	80	67	141	421	310	211
NIGERIA	512	934	139	114	246	70	62
BR. AOC AFR. NES	357	288	481	467	436	180	303
ASIA	1,424	1,830	1,980	1,441	1,582	1,372	10,097
MALAYSIA INC. SINGAP	222	247	385	275	352	---	---
INDONESIA	---	---	40	81	---	---	3,201
CYPRUS	366	616	426	286	468	351	381
SYRIA	---	---	---	---	---	---	1,801
JORDAN	3	4	103	3	2	1	1,821
IRAQ	6	---	1	12	---	---	1,920
FED. SOUTH ARABIA	204	470	469	253	259	213	38
BAHRAIN	228	154	142	119	125	172	144
OCEANIA	4	5	6	20	2	1	1
OTHER	4	---	2	-1	8	4	---

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 051- FRUIT AND NUTS, FRESH, DRIED							
WORLD	86,678	60,494	54,266	61,458	50,321	66,346	55,706
NORTH AMERICA	348	75	151	245	906	1,004	224
EUROPE	83,218	54,801	50,229	55,207	45,177	59,601	49,279
EEC	56,641	26,520	18,811	24,587	12,158	23,214	13,190
BELGIUM-LUXEMBOURG	1,034	1,056	834	473	514	644	582
FRANCE	8,133	2,763	1,591	2,688	921	875	1,998
GERMANY	46,738	22,047	15,746	20,813	8,610	20,112	8,843
NETHERLANDS	606	497	505	451	1,890	1,254	922
EFTA	12,963	18,852	16,782	12,907	12,348	13,580	18,054
AUSTRIA	2,138	7,865	7,772	4,122	3,303	1,672	3,982
DENMARK	609	811	960	1,120	1,541	1,416	2,295
NORWAY	1,290	1,368	1,524	2,119	1,951	2,908	3,488
SWEDEN	3,158	4,139	3,058	2,148	1,565	3,591	5,381
UNITED KINGDOM	5,270	4,211	3,218	3,148	3,750	3,548	2,576
EASTERN EUROPE	4,529	5,400	6,932	6,005	7,460	6,562	6,309
GERMANY EAST	4,521	5,361	6,899	5,998	6,781	5,410	5,505
OTHER EUROPE	9,085	4,029	7,704	11,708	13,211	16,245	11,726
IRELAND	4,629	1,950	4,750	7,949	9,923	11,287	7,894
FINLAND	4,005	1,786	2,484	3,479	2,702	3,928	2,547
LATIN AMERICA	1,157	3,826	1,780	3,728	1,779	3,527	4,257
CACM	---	---	1	---	---	---	---
LAFTA	1,052	3,812	1,758	3,599	1,749	3,503	4,228
BRAZIL	978	3,663	1,673	3,425	1,719	3,431	4,077
OTHER LATIN AMERICA	105	14	21	129	30	24	29
AFRICA	1,636	1,602	1,815	2,054	2,213	1,938	1,749
ANGOLA	775	1,059	1,166	1,456	1,592	1,178	1,159
ASIA	152	38	99	74	115	185	60
OCEANIA	66	52	90	68	41	55	72
OTHER	101	100	102	82	90	36	65

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0511 ORANGES, ETC.							
WORLD	6,527	4,398	7,086				
NORTH AMERICA	26	4	43	1	---	---	---
EUROPE	6,322	4,261	6,797	2,528	1,857	3,009	2,634
EEC	610	259	596	857	221	511	520
BELGIUM-LUXEMBOURG	4	24	109	---	---	150	---
FRANCE	38	51	44	34	29	31	38
GERMANY	459	84	235	748	162	241	482
NETHERLANDS	106	100	208	75	29	88	---
EFTA	946	1,420	1,128	1,021	1,194	1,682	1,635
AUSTRIA	41	29	57	45	30	49	45
DENMARK	49	126	103	71	466	321	340
NORWAY	441	539	469	499	544	309	718
SWEDEN	410	426	495	257	146	729	525
SWITZERLAND	5	220	4	5	8	7	7
UNITED KINGDOM	---	80	---	144	---	267	---
EASTERN EUROPE	6	37	28	5	37	190	146
POLAND	5	32	26	5	36	188	139
OTHER EUROPE	4,760	2,545	5,045	645	405	626	333
IRELAND	3,661	1,847	4,676	---	---	---	---
FINLAND	1,029	673	304	633	350	626	331
LATIN AMERICA	57	10	25	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	1	1	6	---	---	---	---
OTHER LATIN AMERICA	56	9	19	---	---	---	---
AFRICA	83	79	138	15	11	12	9
ASIA	6	5	28	---	---	---	---
OCEANIA	16	2	31	---	---	---	---
OTHER	17	37	24				

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0512 OTHER CITRUS FRUIT							
WORLD		407	534				
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	530	401	523	621	469	578	729
EEC	364	265	153	164	34	66	130
FRANCE	---	1	2	2	2	2	2
GERMANY	338	247	114	132	15	54	128
ITALY	2	8	5	1	---	---	---
NETHERLANDS	24	---	32	29	17	10	---
EFTA	95	71	265	324	314	274	423
AUSTRIA	2	2	39	2	12	8	10
DENMARK	11	6	13	46	70	106	23
NORWAY	20	26	99	56	101	35	99
SWEDEN	45	24	72	138	128	123	289
SWITZERLAND	---	---	2	25	3	2	2
UNITED KINGDOM	17	13	40	57	---	---	---
EASTERN EUROPE	2	1	4	2	24	64	64
POLAND	2	1	4	2	22	54	38
HUNGARY	---	---	---	---	1	8	4
BULGARIA	---	---	---	---	---	---	22
OTHER EUROPE	69	64	101	131	97	174	112
FINLAND	69	64	101	131	96	174	108
LATIN AMERICA	1	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	1	---	---	---	---	---	---
AFRICA	3	---	---	---	---	---	1
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		6	11				

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0514 APPLES, FRESH							
WORLD		38,258	22,454				
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	63,718	38,102	22,264	21,262	13,586	24,414	16,828
EEC	49,244	19,942	7,448	8,576	1,267	12,897	3,123
FRANCE	7,021	1,692	735	1,160	406	38	850
GERMANY	41,798	17,972	6,527	7,416	840	12,828	1,808
NETHERLANDS	358	267	179	---	20	---	---
EFTA	6,478	11,968	6,132	4,311	2,998	3,157	5,652
AUSTRIA	1,846	7,574	3,843	1,822	1,259	496	1,237
DENMARK	65	102	249	424	482	150	929
NORWAY	421	153	129	744	404	389	796
SWEDEN	1,819	2,626	1,551	1,105	799	1,923	2,134
UNITED KINGDOM	2,079	1,425	356	212	50	97	550
EASTERN EUROPE	4,521	5,362	6,900	5,998	7,345	6,235	6,093
GERMANY EAST	4,521	5,361	6,899	5,998	6,737	5,409	5,505
YUGOSLAVIA	---	---	---	---	444	727	588
OTHER EUROPE	3,475	830	1,784	2,377	1,976	2,125	1,960
IRELAND	760	12	---	---	---	---	1
FINLAND	2,648	790	1,680	2,320	1,969	1,988	1,846
LATIN AMERICA	2	---	1	---	---	---	8
CACM	---	---	1	---	---	---	---
LAFTA	---	---	---	---	---	---	8
OTHER LATIN AMERICA		---	---	---	---	---	---
AFRICA	2		---	---	---	---	---
ANGOLA	355	149	180	259	378	239	202
ASIA	86	89	134	228	321	219	173
OCEANIA	1	---	---	---	---	---	---
OTHER	---	---	---	---	---	---	---
		7	9				

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0515 GRAPES, FRESH							
WORLD		1,817	1,076				
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	911	1,616	816	1,179	647	1,342	1,151
EEC	395	727	105	111	30	71	106
FRANCE	13	23	3	9	---	---	2
GERMANY	351	664	102	102	24	71	104
NETHERLANDS	30	24	---	---	6	---	---
EFTA	430	688	509	715	482	895	886
AUSTRIA	32	36	1	3	6	8	4
DENMARK	18	104	95	127	107	406	326
NORWAY	63	120	154	229	127	382	391
SWEDEN	167	183	98	65	40	32	147
UNITED KINGDOM	150	244	161	291	202	65	16
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	86	201	202	353	135	376	159
ICELAND	8	5	9	47	43	16	20
SPAIN	---	---	20	---	---	18	18
FINLAND	78	196	173	306	92	342	121
LATIN AMERICA	1	6	---	---	16	67	226
CACM	---	---	---	---	---	---	---
LAFTA	---	4	---	---	16	67	226
BRAZIL	---	4	---	---	16	67	226
OTHER LATIN AMERICA	1	2	---	---	---	---	---
AFRICA	127	193	255	282	304	192	246
ANGOLA	86	159	190	230	241	142	164
MOZAMBIQUE	16	24	44	47	63	49	82
ASIA	12	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		2	5				

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 052- DRIED FRUIT							
WORLD	9,785	7,405	5,847	8,313	6,535	6,456	4,742
NORTH AMERICA	3,697	2,244	3,729	6,322	4,382	4,160	3,266
UNITED STATES	3,107	1,695	3,457	6,096	4,169	3,905	3,078
CANADA	590	549	272	226	213	255	188
EUROPE	3,571	3,779	1,674	1,505	1,694	1,764	866
EEC	1,973	1,432	1,186	967	726	634	533
BELGIUM-LUXEMBOURG	274	276	332	213	68	47	23
GERMANY	773	592	384	346	356	431	434
NETHERLANDS	761	498	449	367	267	133	62
EFTA	1,149	1,953	402	490	839	964	267
AUSTRIA	10	807	41	229	648	792	99
NORWAY	379	332	145	78	57	38	35
SWEDEN	513	582	42	44	36	32	29
UNITED KINGDOM	162	158	138	86	60	81	42
EASTERN EUROPE	4	4	---	9	---	13	12
OTHER EUROPE	445	390	86	39	129	153	54
IRELAND	239	277	26	8	82	112	5
LATIN AMERICA	484	592	73	89	58	126	150
CACM	8	2	---	---	---	---	---
LAFTA	129	308	69	77	49	116	141
BRAZIL	96	272	67	77	47	111	134
OTHER LATIN AMERICA	347	282	4	12	9	10	9
BR. TERR. AM. NES	332	263	2	7	5	8	6
AFRICA	1,067	483	254	321	359	343	362
ANGOLA	152	179	174	233	241	238	257
ASIA	750	209	96	65	16	22	18
OCEANIA	210	92	14	10	21	33	74
OTHER	6	6	7	1	5	8	6

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 053- FRUITS, PRES. AND PREPS.							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
				METRIC TON			
SITC 054- VEGETABLES, FRESH, FROZEN							
WORLD	369,069	403,858	682,419	822,129	450,521	601,952	463,328
NORTH AMERICA	3,158	3,295	3,502	4,440	3,362	1,925	2,579
EUROPE	312,251	344,312	640,631	753,744	401,720	538,484	417,283
EEC	147,818	140,473	439,001	356,946	148,851	226,343	207,091
BELGIUM-LUXEMBOURG	7,731	12,531	2,751	4,012	7,552	15,868	8,503
FRANCE	5,725	8,342	1,821	2,867	11,047	10,037	10,023
GERMANY	56,465	91,331	380,179	241,702	43,499	72,754	45,826
ITALY	72,085	22,337	50,536	47,357	44,295	72,599	92,920
NETHERLANDS	5,812	5,932	3,714	61,008	42,458	55,085	49,819
EFTA	63,697	137,542	152,312	263,918	88,786	131,796	53,172
PORTUGAL	19,769	7,943	11,552	12,007	12,146	38,829	13,645
SWEDEN	28,498	69,708	107,523	230,532	55,137	74,826	13,592
UNITED KINGDOM	8,889	50,001	26,250	11,322	9,423	7,980	18,475
EASTERN EUROPE	1,339	1,642	1,501	757	469	5,309	833
OTHER EUROPE	99,397	64,655	47,817	132,123	163,614	175,036	156,187
SPAIN	37,984	36,167	38,049	40,854	94,890	82,266	55,607
FINLAND	53,719	22,785	3,978	83,794	61,574	82,789	88,845
LATIN AMERICA	11,350	10,375	8,715	15,175	10,180	9,459	7,112
CACM	31	70	88	98	40	149	92
LAFTA	2,454	2,834	2,460	8,707	1,502	2,180	2,366
OTHER LATIN AMERICA	8,865	7,471	6,167	6,370	8,638	7,130	4,654
AFRICA	21,831	20,631	21,137	27,301	22,128	21,920	25,239
UNION S. AFRICA	6,834	6,468	6,617	6,998	7,874	7,779	5,489
ANGOLA	4,938	4,003	5,851	13,954	7,013	3,796	5,099
ASIA	18,901	24,304	7,789	20,765	11,906	28,767	9,800
CYPRUS	4,445	8,565	2,012	8,537	3,443	12,434	3,428
OCEANIA	1,112	347	201	379	777	1,085	725
OTHER	466	594	444	325	448	312	590

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0555 VEGETABLES, PRES. OR PREP. NES							
WORLD		34,983	54,641	63,235	92,104	109,645	143,644
NORTH AMERICA	4,189	4,481	8,305	9,487	17,397	29,260	65,370
UNITED STATES	3,158	2,390	1,896	2,651	6,539	12,339	47,361
CANADA	1,031	2,091	6,409	6,836	10,858	16,921	18,009
EUROPE	14,102	17,480	32,271	37,098	58,271	62,715	59,313
EEC	4,186	4,029	7,005	7,347	14,484	8,682	7,380
BELGIUM-LUXEMBOURG	340	180	386	715	1,705	1,407	1,344
FRANCE	469	224	1,453	1,145	2,689	893	404
GERMANY	3,017	3,331	4,203	4,786	8,439	4,805	4,571
EFTA	8,533	12,427	23,853	28,129	41,537	51,371	49,528
DENMARK	469	569	1,195	857	1,164	1,365	1,139
NORWAY	1,333	1,436	2,059	2,086	2,271	2,099	2,133
SWEDEN	1,009	2,427	2,721	1,939	2,360	3,453	4,214
SWITZERLAND	239	350	237	535	1,495	867	1,322
UNITED KINGDOM	5,450	7,621	17,408	22,475	33,999	43,301	40,443
EASTERN EUROPE	5	5	5	11	7	24	42
OTHER EUROPE	1,378	1,019	1,408	1,611	2,243	2,638	2,363
BRIT. AOC	916	592	645	769	866	833	637
LATIN AMERICA	1,971	2,311	2,100	2,098	2,288	2,030	2,322
CACM	16	19	11	13	22	34	13
LAFTA	883	1,272	1,024	881	1,150	964	1,613
OTHER LATIN AMERICA	1,072	1,020	1,065	1,204	1,116	1,032	696
AFRICA	7,151	4,806	4,835	6,917	6,172	5,468	7,421
UNION S. AFRICA	2,244	67	83	1,336	121	83	2,543
ANGOLA	927	1,020	1,221	1,757	1,831	1,439	1,447
MOZAMBIQUE	607	733	732	934	874	1,046	1,111
ASIA	7,480	5,710	6,991	7,384	7,690	9,605	8,763
JAPAN	847	620	464	263	311	1,472	2,558
MALAYSIA INC. SINGAP	2,803	1,481	2,432	2,481	2,831	---	---
SAUDI ARABIA	243	388	503	897	666	1,403	902
KUWAIT	710	748	1,013	651	737	867	550
BAHRAIN	811	796	856	932	1,054	1,052	999
OCEANIA	681	186	130	247	264	548	408
OTHER		9	9	4	22	19	47

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0611 RAW SUGAR							
WORLD	3,325	7,927	3,908	2,124	82	41	370
NORTH AMERICA	---	---	---	---	1	---	---
EUROPE	3,325	7,919	3,900	2,119	41	29	369
EEC	2,767	3,530	5	3	4	---	37
FRANCE	136	141	---	---	1	---	---
GERMANY	1,696	1,896	2	2	3	---	22
ITALY	933	1,491	1	---	---	---	15
EFTA	557	4,389	3,886	2,106	36	1	332
AUSTRIA	549	572	5	---	---	---	---
SWEDEN	1	3,816	3,881	2,101	---	1	---
SWITZERLAND	---	---	---	---	---	---	332
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	1	---	9	10	1	28	---
LATIN AMERICA	---	---	1	---	6	6	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	1	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	1	---	6	5	---
ASIA	6	5	7	4	18	5	2
OCEANIA	---	---	---	---	14	---	---
OTHER		---	---	---	---	---	---
		3	---	1	2	1	-1

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 071- COFFEE							
WORLD	5,695	6,290	6,966	7,368	11,710	14,754	9,354
NORTH AMERICA	97	298	137	192	185	314	484
UNITED STATES	51	264	95	160	148	270	349
EUROPE	4,056	4,643	5,573	6,062	10,121	13,102	7,557
EEC	3,100	3,377	4,086	4,456	8,298	10,797	4,881
FRANCE	106	80	86	85	96	81	158
GERMANY	812	746	775	743	726	816	977
ITALY	2,012	2,409	3,096	3,412	7,315	9,627	3,396
NETHERLANDS	110	95	52	91	114	65	325
EFTA	624	829	863	976	1,261	1,778	1,999
AUSTRIA	104	112	125	180	259	371	487
DENMARK	141	291	108	57	60	154	87
NORWAY	91	79	193	258	274	327	359
SWEDEN	212	215	303	216	450	675	881
EASTERN EUROPE	15	7	2	13	23	33	55
OTHER EUROPE	317	430	622	617	539	494	622
IRELAND	114	170	344	282	214	217	313
FINLAND	96	180	175	218	136	126	135
LATIN AMERICA	215	184	154	160	150	162	145
CACM	---	---	---	---	---	---	---
LAFTA	---	1	---	13	---	---	---
OTHER LATIN AMERICA	215	183	154	147	150	162	145
BR. TERR. AM. NES	165	143	72	57	69	79	70
AFRICA	695	668	520	375	525	398	325
GHANA	219	216	125	58	156	43	23
NIGERIA	205	198	157	55	45	45	48
ASIA	578	455	540	557	697	748	807
MALAYSIA INC. SINGAP	180	166	212	215	271	---	---
OCEANIA	48	26	22	17	28	13	17
OTHER	6	16	20	5	4	17	19

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 072- COCOA							
WORLD	14,727	18,328	8,337	6,184	8,043	9,343	9,264
NORTH AMERICA	2,909	2,527	2,137	1,797	2,022	2,029	1,617
UNITED STATES	524	138	1,228	547	662	524	170
CANADA	2,385	2,389	909	1,250	1,360	1,505	1,447
EUROPE	7,697	12,011	3,585	1,765	3,139	4,432	4,321
EEC	5,982	10,295	1,998	453	500	1,191	507
GERMANY	2,164	938	55	136	161	99	116
NETHERLANDS	3,692	9,123	1,872	237	224	912	325
EFTA	1,393	1,432	870	873	1,128	718	992
AUSTRIA	94	353	5	4	344	206	211
DENMARK	661	524	421	397	346	112	152
SWEDEN	332	320	234	352	254	318	332
EASTERN EUROPE	94	33	53	119	97	96	24
OTHER EUROPE	228	251	664	320	1,414	2,427	2,798
IRELAND	81	84	504	167	1,253	2,265	2,567
LATIN AMERICA	1,070	1,052	964	839	746	751	697
CACM	12	19	18	14	6	14	9
LAFTA	220	279	362	248	164	120	61
PERU	159	130	198	158	143	102	36
OTHER LATIN AMERICA	838	754	584	577	576	617	627
BR. TERR. AM. NES	727	649	159	146	162	179	143
TRINIDAD TOBAGO	---	---	225	228	211	223	186
AFRICA	572	581	569	623	649	705	757
UNION S. AFRICA	38	68	218	339	156	262	331
KENYA	---	---	147	78	187	214	213
ASIA	406	471	496	651	1,011	961	1,201
PHILIPPINES	---	6	63	233	377	463	905
OCEANIA	2,071	1,682	581	508	470	463	665
AUSTRALIA	2,012	1,575	474	368	242	400	610
OTHER	2	4	5	1	6	2	6

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 073- CHOCOLATE AND PREPS.							
WORLD	29,908	36,844	44,151	40,423	43,124	45,867	60,586
NORTH AMERICA	8,556	8,387	7,950	9,304	9,346	11,194	17,299
UNITED STATES	5,337	5,858	5,425	5,636	6,110	7,870	12,157
CANADA	3,219	2,529	2,525	3,668	3,236	3,324	5,142
EUROPE	14,661	21,538	27,900	22,370	24,207	25,629	33,972
EEC	8,734	14,155	18,906	11,832	12,880	11,224	17,532
BELGIUM-LUXEMBOURG	856	1,360	2,033	1,275	1,443	1,414	1,402
FRANCE	428	521	868	682	612	565	823
GERMANY	6,362	7,913	9,758	7,480	8,662	6,820	11,599
ITALY	724	971	1,212	1,242	1,338	1,617	2,276
NETHERLANDS	364	3,390	5,035	1,153	825	808	1,432
EFTA	3,499	4,633	6,182	7,142	8,532	11,156	13,515
AUSTRIA	561	721	1,061	1,088	1,546	2,057	2,817
DENMARK	1,423	1,762	2,212	2,969	2,771	3,224	3,428
NORWAY	432	764	589	561	708	983	1,586
SWEDEN	385	484	956	1,269	1,820	2,062	2,618
SWITZERLAND	55	69	242	279	589	990	1,129
UNITED KINGDOM	618	807	1,082	919	1,032	1,767	1,850
EASTERN EUROPE	53	78	107	140	167	281	392
OTHER EUROPE	2,375	2,672	2,705	3,256	2,628	2,968	2,533
IRELAND	1,694	1,889	1,550	1,819	885	1,046	466
BRIT. ADC	570	556	699	766	725	771	858
LATIN AMERICA	1,377	1,262	1,436	1,431	1,785	1,709	1,788
CACM	15	16	18	19	22	30	33
LAFTA	469	340	295	273	286	302	274
OTHER LATIN AMERICA	893	906	1,123	1,139	1,477	1,377	1,481
BR. TERR. AM. NES	744	766	334	362	419	435	486
AFRICA	1,562	1,660	2,015	2,072	2,101	1,912	2,041
ASIA	3,520	3,749	4,437	4,915	5,274	5,165	5,053
JAPAN	652	582	613	765	678	784	913
MALAYSIA INC. SINGAP	1,036	1,254	1,570	1,573	1,498	---	---
HONG KONG	552	741	867	1,111	1,261	1,250	1,278
KUWAIT	283	331	423	409	570	574	788
OCEANIA	234	238	400	322	388	247	412
OTHER	-2	10	13	9	23	11	21

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 074- TEA AND MATE							
WORLD	91	122	153	162	164	197	
NORTH AMERICA	---	---	---	---	2	---	1
EUROPE	68	90	119	145	157	159	190
EEC	48	68	60	63	70	87	105
FRANCE	5	6	7	7	13	22	25
GERMANY	36	42	34	37	39	36	33
ITALY	7	20	19	18	18	28	46
EFTA	19	14	32	48	52	33	49
AUSTRIA	1	1	3	5	6	6	8
DENMARK	1	---	2	3	8	8	8
NORWAY	9	7	21	21	24	13	27
SWEDEN	8	6	4	3	5	4	2
UNITED KINGDOM	---	---	2	16	9	2	3
EASTERN EUROPE	---	---	---	---	---	1	3
OTHER EUROPE	1	8	27	34	35	38	33
FINLAND	1	8	27	32	30	36	30
LATIN AMERICA	---	---	---	4	1	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	4	1	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	1	1	1	1
ASIA	---	---	---	---	---	---	1
OCEANIA	---	---	---	---	---	---	---
OTHER	1	3	3	1	4	4	

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EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 075- SPICES							
WORLD	1,042	1,501	1,255	1,461	1,465	1,533	1,956
NORTH AMERICA	20	160	57	81	17	19	62
UNITED STATES	8	152	51	77	9	18	46
EUROPE	523	681	685	767	821	945	1,338
EEC	236	286	289	404	493	465	824
BELGIUM-LUXEMBOURG	15	23	23	24	22	17	14
FRANCE	20	3	5	16	19	23	18
GERMANY	140	188	201	295	332	331	582
ITALY	14	9	16	21	37	40	26
NETHERLANDS	47	63	44	48	83	54	184
EFTA	126	179	162	150	158	212	239
DENMARK	42	59	50	57	64	60	59
NORWAY	38	48	51	32	20	29	50
SWEDEN	24	46	32	36	35	56	38
SWITZERLAND	9	10	15	12	22	40	33
EASTERN EUROPE	---	---	3	12	6	3	12
OTHER EUROPE	161	216	231	201	164	265	263
ICELAND	43	84	84	85	64	53	65
IRELAND	64	68	77	69	61	113	112
SPAIN	5	---	29	1	5	55	24
FINLAND	35	48	29	33	22	33	48
LATIN AMERICA	131	107	114	133	154	168	144
CACM	---	---	1	2	2	2	2
LAFTA	43	18	9	15	37	22	35
OTHER LATIN AMERICA	88	89	104	116	115	144	107
JAMAICA	---	---	32	46	39	37	43
BR. TERR. AM. NES	75	80	17	21	19	24	19
TRINIDAD TOBAGO	---	---	40	31	40	55	30
AFRICA	238	237	260	308	351	273	285
UNION S. AFRICA	29	25	45	37	27	12	5
NIGERIA	21	24	22	29	34	48	24
ANGOLA	80	96	95	131	135	93	129
MOZAMBIQUE	62	59	58	78	94	79	96
ASIA	99	288	108	124	89	97	89
JAPAN	51	229	47	82	---	3	2
MALAYSIA INC. SINGAP	23	19	23	12	28	---	---
PHILIPPINES	2	14	15	2	27	28	25
OCEANIA	27	21	19	40	22	30	25
AUSTRALIA	15	15	14	31	18	25	17
OTHER	4	7	12	8	11	1	13

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EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 081- ANIMAL FEEDS							
WORLD	414,689	463,881	605,803	724,512	872,590	920,494	1,301,570
NORTH AMERICA	1,131	1,890	6,941	2,954	3,391	25,001	106,614
UNITED STATES	207	1,070	5,790	2,005	2,157	24,036	104,383
EUROPE	403,368	451,314	587,774	710,673	851,072	872,821	1,170,049
EEC	133,899	165,894	206,090	251,011	333,371	391,639	508,637
BELGIUM-LUXEMBOURG	4,644	3,182	7,993	11,503	18,792	24,257	32,727
FRANCE	22,736	10,581	21,250	34,802	36,842	57,855	66,473
GERMANY	91,407	135,478	149,617	178,121	211,169	254,396	291,644
ITALY	5,306	3,821	7,044	6,432	10,255	14,274	16,917
NETHERLANDS	9,806	12,832	20,186	20,153	56,313	40,857	100,876
EFTA	222,991	242,795	327,405	379,552	411,521	380,986	497,414
DENMARK	24,771	7,886	17,185	14,807	14,323	20,719	30,908
NORWAY	4,986	8,788	9,606	9,766	9,892	12,106	11,087
SWEDEN	93,053	119,412	153,987	181,838	203,038	183,577	214,692
SWITZERLAND	21,277	51,245	62,735	49,222	49,723	44,701	53,588
UNITED KINGDOM	73,063	50,375	77,147	114,763	123,544	111,765	178,111
EASTERN EUROPE	27,316	11,725	22,661	33,621	51,232	52,723	85,580
GERMANY EAST	4,936	29	955	8,268	14,919	13,880	10,920
POLAND	13,897	8,284	10,739	15,508	16,704	23,088	36,338
OTHER EUROPE	19,162	30,900	31,618	46,489	54,948	47,473	78,418
SPAIN	1,836	9,486	11,049	26,228	29,267	18,656	25,106
FINLAND	9,192	13,549	6,129	8,027	9,366	11,265	15,817
LATIN AMERICA	1,091	1,884	1,284	1,453	3,459	4,637	1,467
CACM	2	---	3	179	9	30	21
LAFTA	91	35	53	98	267	395	163
OTHER LATIN AMERICA	998	1,849	1,228	1,176	3,183	4,212	1,283
AFRICA	3,875	3,360	3,960	3,440	6,212	4,642	6,248
ASIA	5,018	5,030	5,554	5,240	7,210	9,152	12,385
OCEANIA	209	411	287	757	1,253	4,229	4,795
OTHER	-3	-8	3	-5	-7	12	12

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EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0812 BRAN, POLLARD AND SHARPS							
WORLD		5,671	5,095				
NORTH AMERICA	19	27	14	47	28	24	26
UNITED STATES	19	27	14	42	28	24	26
EUROPE	3,075	5,644	5,030	6,092	10,191	20,003	8,624
EEC	297	220	138	52	195	5,258	40
GERMANY	41	42	118	52	184	5,247	22
NETHERLANDS	256	157	---	---	---	---	---
EFTA	2,561	5,061	4,806	5,817	9,959	14,736	8,581
AUSTRIA	79	100	539	799	2,504	2,375	960
DENMARK	15	---	---	---	---	5,264	---
SWEDEN	1,587	4,265	4,262	5,016	7,455	7,095	6,983
UNITED KINGDOM	850	662	---	---	---	2	638
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	217	363	86	223	37	9	3
SPAIN	145	100	80	165	19	---	---
FINLAND	---	259	---	---	---	---	---
LATIN AMERICA	3	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	3	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	116	---	50	---	---	---	---
ASIA	38	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		---	1				

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EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0813 OILSEED CAKE AND MEAL							
WORLD	141,443	188,928	157,602				
NORTH AMERICA	---	---	10	---	1	---	---
EUROPE	141,332	188,722	157,501	173,593	181,526	173,967	247,987
EEC	51,504	81,926	23,182	28,304	33,235	42,826	58,608
FRANCE	978	3,204	1,722	25	543	6,462	7,704
GERMANY	49,759	75,300	20,066	27,131	32,060	35,871	50,508
NETHERLANDS	745	3,172	200	119	600	296	---
EFTA	79,917	106,710	123,687	143,767	145,080	130,303	177,303
DENMARK	5,092	1,278	10,092	8,350	1,746	7,408	23,747
NORWAY	293	3,406	2,313	2,040	2,089	1,368	19
SWEDEN	70,522	98,008	105,734	125,139	135,133	114,364	141,557
UNITED KINGDOM	2,860	3,554	5,107	7,968	5,726	6,926	10,994
EASTERN EUROPE	9,869	---	5,227	1,484	1,025	50	9,524
POLAND	6,069	---	---	500	1,025	---	6,994
OTHER EUROPE	42	86	5,405	38	2,186	788	2,552
IRELAND	16	71	4,676	---	1,050	586	2,019
LATIN AMERICA	28	66	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	28	66	---	---	---	---	---
AFRICA	28	14	12	12	584	119	712
ASIA	55	115	80	---	47	23	---
OCEANIA	---	15	---	---	---	---	---
OTHER	---	-4	-1				

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0814 MEAT AND FISH MEAL							
WORLD	859	133,828	175,444	---	72	22,706	100,863
NORTH AMERICA	62	1,593	1,429	---	72	22,706	100,863
UNITED STATES	190,151	851	1,429	260,242	342,696	316,918	491,082
EUROPE	53,388	131,842	173,834	77,066	117,369	104,847	191,350
EEC	4,089	34,350	54,961	9,945	18,009	23,348	31,595
BELGIUM-LUXEMBOURG	20,093	2,730	6,261	29,739	31,492	39,073	46,516
FRANCE	23,400	5,674	12,999	24,824	30,474	24,831	80,309
GERMANY	1,499	19,795	26,413	4,447	8,895	9,324	13,401
ITALY	4,307	1,191	3,714	8,111	28,499	8,271	19,529
NETHERLANDS	107,843	4,960	5,574	142,395	167,134	153,402	228,290
EFTA	3,768	69,096	96,636	6,779	7,503	4,918	5,651
AUSTRIA	16,690	3,629	4,681	4,701	10,403	5,574	4,883
DENMARK	10,662	4,029	4,314	15,327	22,563	25,643	36,037
SWEDEN	11,076	4,564	5,768	13,959	16,025	12,339	14,372
SWITZERLAND	65,527	11,118	10,013	101,619	110,565	104,631	166,303
UNITED KINGDOM	16,955	45,618	71,860	31,082	44,109	45,566	55,447
EASTERN EUROPE	4,935	11,457	13,927	8,167	14,900	13,880	10,887
GERMANY EAST	7,827	---	948	14,926	14,661	22,613	26,353
POLAND	3,704	8,279	10,739	4,868	10,275	4,683	9,443
CZECHOSLOVAKIA	---	2,978	2,240	1,578	3,666	3,504	7,454
HUNGARY	283	200	---	1,543	291	547	908
ROMANIA	11,975	---	---	9,699	14,084	13,103	15,995
OTHER EUROPE	1,395	16,939	8,310	2,042	3,331	3,636	6,427
GREECE	580	644	1,313	549	303	304	984
IRELAND	824	1,664	623	---	2,467	2,298	1
SPAIN	9,147	1,321	541	7,108	7,983	6,865	8,487
FINLAND	72	13,133	5,833	---	2,000	3,000	---
LATIN AMERICA	---	72	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	72	1	---	---	2,000	3,000	---
OTHER LATIN AMERICA	70	71	---	---	---	---	---
BR. TERR. AM. NES	329	70	130	171	507	222	41
AFRICA	559	267	50	50	11	119	1,700
ASIA	3	51	---	---	---	---	150
OCEANIA		8					
OTHER		-5	1				

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 091- MARGARINE AND SHORTENING							
WORLD	39,535	43,199	45,707	49,055	46,470	38,748	46,677
NORTH AMERICA	357	400	409	301	440	257	261
EUROPE	29,001	32,467	34,493	28,427	34,087	27,979	25,602
EEC	8,390	8,680	8,372	6,196	7,565	9,708	7,622
GERMANY	4,090	4,329	3,678	2,786	3,380	3,551	3,316
ITALY	626	554	1,064	559	204	63	261
NETHERLANDS	3,264	3,386	3,222	2,418	3,624	5,448	3,540
EFTA	13,685	15,392	14,231	8,109	21,435	17,153	13,752
SWEDEN	4,022	3,929	4,121	430	5,814	519	341
UNITED KINGDOM	9,338	11,224	9,906	7,462	15,152	16,018	12,751
EASTERN EUROPE	3,711	4,919	8,541	12,405	905	166	2,485
POLAND	1	---	862	6,690	3	2	1,177
CZECHOSLOVAKIA	1,200	1,023	1,128	2,050	---	100	---
HUNGARY	2,500	2,510	5,435	3,664	900	50	1,301
OTHER EUROPE	3,215	3,476	3,349	1,717	4,182	952	1,743
SPAIN	1,383	1,572	1,593	225	1,936	49	44
BRIT. AOC	1,492	1,557	1,524	1,448	1,247	771	780
LATIN AMERICA	1,677	1,669	1,631	2,973	1,954	1,751	1,797
CACM	2	3	2	---	---	---	---
LAFTA	2	10	20	13	127	29	21
OTHER LATIN AMERICA	1,673	1,656	1,609	2,960	1,827	1,722	1,776
BR. TERR. AM. NES	1,651	1,639	1,568	1,733	1,575	1,671	1,721
AFRICA	4,972	5,270	5,262	5,403	6,180	5,402	6,265
SIERRA LEONE	386	389	463	490	493	552	700
GHANA	2,034	1,720	1,320	1,192	1,876	661	1,170
ANGOLA	438	648	816	884	1,072	1,238	1,453
BR. AOC AFR. NES	131	1,112	1,167	1,435	1,328	1,477	1,002
ASIA	3,206	3,062	3,477	3,117	3,684	3,036	3,410
HONG KONG	524	431	485	475	610	474	446
CYPRUS	1,108	997	1,207	1,188	1,275	1,286	1,278
OCEANIA	321	325	431	302	118	120	201
OTHER	1	6	4	8,532	7	203	9,141

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 0913 LARD, ETC.							
WORLD	23,221	26,687	25,146	26,923	22,625	26,836	23,933
NORTH AMERICA	332	398	31	---	---	---	---
EUROPE	19,690	23,167	24,625	25,431	22,117	26,357	23,490
EEC	7,582	7,819	6,858	4,875	6,161	9,196	7,251
GERMANY	3,737	3,995	3,314	2,298	2,789	3,359	3,257
ITALY	596	516	483	33	1	41	219
NETHERLANDS	3,087	3,186	2,942	2,390	3,301	5,418	3,509
EFTA	8,191	10,138	9,055	7,900	14,974	16,901	13,502
UNITED KINGDOM	7,863	9,886	8,812	7,419	14,309	15,963	12,713
EASTERN EUROPE	3,711	4,914	8,537	12,404	905	165	2,476
GERMANY EAST	---	1,375	1,113	---	---	---	---
POLAND	1	---	861	6,690	3	2	1,170
CZECHOSLOVAKIA	1,200	1,023	1,128	2,050	---	100	---
HUNGARY	2,500	2,510	5,435	3,664	900	50	1,301
OTHER EUROPE	206	296	175	252	77	95	261
LATIN AMERICA	1,200	1,239	90	1,221	168	102	87
CACM	2	3	---	---	---	---	---
LAFTA	---	8	9	4	109	---	---
OTHER LATIN AMERICA	1,198	1,228	81	1,217	59	102	87
BR. TERR. AM. NES	1,193	1,221	76	12	34	92	70
AFRICA	750	652	231	109	98	90	58
ASIA	1,131	1,103	165	158	240	284	282
OCEANIA	113	130	2	3	---	---	1
OTHER	5	-2	2	1	2	3	15

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 1121 WINE OF FRESH GRAPES							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
	NOT AVAILABLE						
SITC 1123 BEER							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
				METRIC TON			
SITC 121- TOBACCO, UNMANUFACTURED							
WORLD	1,325	1,106	957	1,201	1,378	1,646	1,068
NORTH AMERICA	182	207	116	116	127	100	46
UNITED STATES	182	207	115	116	126	100	46
EUROPE	1,143	897	840	1,082	1,247	1,540	995
EEC	544	417	245	284	380	734	831
BELGIUM-LUXEMBOURG	30	52	43	33	25	30	50
FRANCE	---	---	1	4	11	94	230
GERMANY	380	239	87	76	99	331	276
NETHERLANDS	134	126	114	171	245	279	275
EFTA	137	141	360	391	419	347	83
DENMARK	62	36	8	88	75	161	43
NORWAY	25	35	11	31	4	11	15
SWEDEN	45	63	330	256	338	175	19
EASTERN EUROPE	414	320	200	383	424	383	---
HUNGARY	404	310	200	383	424	383	---
OTHER EUROPE	48	19	35	24	24	76	81
FINLAND	48	19	35	24	24	76	81
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	8
ASIA	---	---	---	4	3	4	12
OCEANIA	---	---	---	---	---	---	1
OTHER	---	2	1	-1	1	2	6

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 211- HIDES AND SKINS, CRUDE							
WORLD	70,564	77,458	83,408	80,805	77,925	91,002	104,042
NORTH AMERICA	3,008	3,037	3,003	2,870	3,252	3,672	2,466
UNITED STATES	2,867	2,910	2,825	2,860	3,200	3,611	2,435
EUROPE	65,417	71,735	76,919	75,050	72,482	84,290	99,101
EEC	34,435	36,646	36,059	35,390	31,145	35,989	48,602
BELGIUM-LUXEMBOURG	2,448	2,331	2,354	1,985	1,954	2,410	5,060
FRANCE	5,002	3,283	3,828	2,963	1,684	2,370	3,803
GERMANY	16,697	18,672	17,981	19,475	17,802	19,129	19,726
ITALY	3,642	4,472	6,366	4,280	4,594	6,896	10,981
NETHERLANDS	6,646	7,888	5,530	6,687	5,111	5,184	9,032
EFTA	16,848	21,329	23,425	18,528	17,369	20,042	21,800
DENMARK	2,447	2,304	2,580	2,081	1,533	1,564	1,448
NORWAY	830	1,249	1,626	1,092	1,052	2,071	1,353
SWEDEN	4,676	5,766	6,722	7,311	7,156	6,874	8,708
SWITZERLAND	742	941	760	756	796	792	1,216
UNITED KINGDOM	7,106	9,933	10,974	6,751	6,367	7,830	7,611
EASTERN EUROPE	11,186	9,103	12,762	16,106	19,551	22,456	22,704
GERMANY EAST	2,831	2,808	5,131	6,101	4,437	5,558	4,416
POLAND	975	1,156	2,184	2,019	2,196	4,939	6,172
CZECHOSLOVAKIA	4,348	3,332	4,095	5,346	7,248	7,206	6,312
HUNGARY	584	816	661	923	1,598	992	1,419
ROMANIA	1,043	340	---	419	2,036	1,138	1,248
YUGOSLAVIA	1,323	588	619	1,294	1,934	2,310	3,017
OTHER EUROPE	2,948	4,657	4,673	5,026	4,417	5,803	5,995
IRELAND	2,359	2,795	3,712	4,155	3,722	4,164	3,651
LATIN AMERICA	10	---	6	---	84	15	60
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	82	11	60
OTHER LATIN AMERICA	---	---	6	---	2	4	---
AFRICA	10	---	---	---	100	687	279
ASIA	76	92	418	170	1,991	2,303	2,108
OCEANIA	2,009	2,601	3,020	2,702	1	31	19
OTHER	41	7	35	18	15	4	9
	3	-14	7	-5			

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 221- OILSEEDS, ETC.							
WORLD	59,475	54,974	87,080	116,645	131,372	74,922	69,220
NORTH AMERICA	11,882	5,425	4,010	3,001	1,998	705	2,945
UNITED STATES	11,405	5,330	3,992	2,948	1,939	665	2,905
EUROPE	36,643	45,681	82,838	113,337	128,733	73,561	62,024
EEC	25,103	38,212	62,771	89,967	105,795	53,178	52,451
FRANCE	3,284	5,130	6,433	3,229	45	19	19
GERMANY	6,484	12,741	23,116	26,782	48,366	23,236	28,984
ITALY	7,388	6,889	28,398	55,335	44,185	26,730	18,476
NETHERLANDS	7,440	12,928	4,599	3,582	12,570	2,563	3,973
EFTA	2,165	6,188	8,243	8,053	8,434	7,741	5,480
NORWAY	449	2,768	2,322	3,313	2,705	1,300	1,655
UNITED KINGDOM	1,451	15	3,049	3,365	4,967	4,875	2,605
EASTERN EUROPE	3,210	1,187	11,189	14,341	9,125	6,599	2,591
POLAND	180	3	---	7,562	6,685	148	2
CZECHOSLOVAKIA	2,632	608	11,159	5,825	1,496	4,588	2,181
OTHER EUROPE	6,165	94	635	976	5,379	6,043	1,502
FINLAND	6,157	77	575	746	4,629	4,912	853
LATIN AMERICA	25	31	61	82	64	115	76
CACM	---	---	---	---	---	---	---
LAFTA	11	15	52	43	41	87	52
OTHER LATIN AMERICA	14	16	9	39	23	28	24
AFRICA	10,741	3,562	16	20	161	78	3,395
ALGERIA	10,723	3,546	4	2	4	---	3,338
ASIA	16	19	40	22	37	13	221
OCEANIA	169	259	115	182	377	445	530
OTHER	-1	-3	---	1	2	5	29

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2211 PEANUTS, GREEN							
WORLD	840	828	1,163	32	52	38	33
NORTH AMERICA	729	257	80	---	---	---	---
UNITED STATES	111	184	62	32	52	38	33
CANADA	506	73	18	123	107	120	170
EUROPE	479	281	929	66	52	68	22
EEC	52	211	751	---	---	---	---
BELGIUM-LUXEMBOURG	8	6	109	---	---	---	---
FRANCE	165	20	9	62	13	46	20
GERMANY	1	111	203	3	15	7	---
ITALY	253	---	9	1	24	15	2
NETHERLANDS	21	74	421	3	6	1	40
EFTA	---	45	101	---	5	---	15
AUSTRIA	6	1	1	---	1	1	---
NORWAY	12	16	12	3	---	---	25
SWEDEN	---	17	80	---	---	---	50
EASTERN EUROPE	---	1	---	---	---	---	48
HUNGARY	6	---	---	54	49	51	58
OTHER EUROPE	3	24	77	---	---	---	---
IRELAND	---	9	42	2	23	22	29
SPAIN	---	---	7	32	24	27	26
FINLAND	13	12	26	---	---	---	---
LATIN AMERICA	---	16	18	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	13	---	9	---	---	---	---
OTHER LATIN AMERICA	10	16	9	---	---	---	---
BR. TERR. AM. NES	18	16	6	---	---	---	---
AFRICA	10	16	16	---	---	---	---
UNION S. AFRICA	5	7	7	---	---	---	---
ASIA	168	4	7	---	---	---	---
OCEANIA	161	253	113	---	---	---	---
AUSTRALIA	7	231	101	---	---	---	---
NEW ZEALAND		22	12	---	---	---	---
OTHER		1	---				

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2212 COPRA							
WORLD		323	---				
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	70	323	---	---	---	1	---
EEC	70	---	---	---	---	---	---
BELGIUM-LUXEMBOURG	70	---	---	---	---	---	---
EFTA	---	323	---	---	---	1	---
DENMARK	---	323	---	---	---	1	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		---	---				

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 2213 PALM NUTS AND KERNELS							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2214 SOYBEANS							
WORLD	---	---	---	---	---	---	---
NORTH AMERICA	---	---	---	---	---	---	---
EUROPE	5	---	---	---	---	---	---
EEC	---	---	---	---	---	---	---
EASTERN EUROPE	---	---	---	---	---	---	---
OTHER EUROPE	---	---	---	---	---	---	---
LATIN AMERICA	---	---	---	---	---	---	---
CACM	---	---	---	---	---	---	---
LAFTA	---	---	---	---	---	---	---
OTHER LATIN AMERICA	---	---	---	---	---	---	---
AFRICA	---	---	---	---	---	---	---
ASIA	---	---	---	---	---	---	---
OCEANIA	---	---	---	---	---	---	---
OTHER		---	---				

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
	NOT AVAILABLE						
SITC 2216 COTTONSEED							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			NOT AVAILABLE				
SITC 2217 CASTOR OIL SEEDS							
WORLD							
NORTH AMERICA							
EUROPE							
EEC							
EASTERN EUROPE							
OTHER EUROPE							
LATIN AMERICA							
CACM							
LAFTA							
OTHER LATIN AMERICA							
AFRICA							
ASIA							
OCEANIA							
OTHER							

TABLE 8--CONTINUED

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 262- WOOL AND HAIR							
WORLD	111,483	131,463	120,409	100,858	95,553	91,982	77,505
NORTH AMERICA	25,510	30,038	29,931	25,758	27,468	23,100	20,566
UNITED STATES	18,996	22,313	21,788	17,850	19,148	16,428	14,007
CANADA	6,514	7,725	8,143	7,908	8,320	6,672	6,559
EUROPE	58,311	76,363	65,376	58,598	55,968	56,511	47,380
EEC	26,909	38,682	30,872	24,561	23,058	23,851	18,805
BELGIUM-LUXEMBOURG	3,239	4,886	4,152	4,194	3,242	2,508	1,764
FRANCE	3,173	5,894	3,586	3,206	2,579	2,694	1,929
GERMANY	7,764	11,097	7,819	6,246	6,284	5,449	4,497
ITALY	10,334	12,413	12,456	8,698	7,882	9,680	8,740
NETHERLANDS	2,399	4,392	2,859	2,217	3,071	3,520	1,875
EFTA	14,069	15,194	14,932	14,564	12,631	12,032	10,576
AUSTRIA	2,563	2,293	1,927	2,052	1,658	1,773	1,632
DENMARK	2,850	3,254	3,236	2,726	1,921	1,771	1,560
NORWAY	1,425	1,792	1,790	1,724	1,354	1,659	1,613
SWEDEN	4,023	4,562	4,336	4,365	3,734	3,186	2,481
SWITZERLAND	1,721	1,731	1,642	1,779	1,718	1,504	1,119
UNITED KINGDOM	1,113	1,182	1,465	1,213	1,827	1,884	1,834
EASTERN EUROPE	6,041	7,043	6,834	6,516	7,955	6,951	6,807
POLAND	1,674	3,332	1,639	1,826	3,329	2,015	2,128
CZECHOSLOVAKIA	1,053	1,336	2,310	912	1,205	847	889
HUNGARY	484	775	1,197	1,437	1,351	1,447	1,284
YUGOSLAVIA	761	1,370	1,453	1,772	1,352	1,803	1,592
OTHER EUROPE	11,292	15,444	12,738	12,957	12,324	13,677	11,192
GREECE	3,819	5,191	4,354	3,585	4,119	4,455	2,647
IRELAND	3,228	4,127	3,598	4,724	4,291	4,840	4,855
FINLAND	3,487	4,099	3,560	3,800	2,787	3,372	3,098
LATIN AMERICA	2,013	1,665	489	338	415	305	171
CACM	---	1	---	---	22	1	1
LAFTA	1,726	1,480	338	139	228	150	88
OTHER LATIN AMERICA	287	184	151	199	165	154	82
AFRICA	4,263	5,960	5,316	5,281	3,904	3,019	2,164
UNION S. AFRICA	1,003	2,658	1,714	1,474	1,730	1,842	1,606
EGYPT	3,059	2,841	3,372	3,423	1,940	814	119
ASIA	20,465	15,382	18,066	9,119	6,181	7,469	6,048
JAPAN	9,393	4,616	7,285	3,516	2,312	2,882	2,478
CHINA MAINLAND	4,186	926	1,847	1,379	809	1,454	378
PAKISTAN	1,459	1,770	1,419	1,044	696	974	648
INDIA	3,994	6,164	5,778	1,281	500	143	267
OCEANIA	912	2,049	1,211	1,749	1,600	1,567	1,170
OTHER	9	6	20	15	17	11	6

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2631 RAW COTTON EXCLUDING LINTERS							
WORLD	995	1,087	14,879				
NORTH AMERICA	16	3	3,095	---	---	---	---
UNITED STATES	16	---	3,008	---	---	---	---
EUROPE	921	945	8,831	440	405	699	1,133
EEC	608	501	5,463	194	144	227	197
BELGIUM-LUXEMBOURG	164	20	969	---	---	70	8
FRANCE	136	143	879	10	5	---	16
GERMANY	272	285	2,330	157	139	146	173
ITALY	1	---	468	8	---	11	---
NETHERLANDS	35	53	817	19	---	---	---
EFTA	2	249	1,567	215	261	471	878
AUSTRIA	---	70	91	21	1	106	10
DENMARK	---	---	211	---	---	---	---
NORWAY	---	10	587	20	97	208	720
PORTUGAL	---	---	156	---	---	91	---
SWEDEN	---	50	389	64	---	---	34
SWITZERLAND	2	---	123	---	---	66	33
UNITED KINGDOM	---	119	10	110	163	---	81
EASTERN EUROPE	---	139	73	---	---	1	58
CZECHOSLOVAKIA	151	96	73	---	---	---	---
OTHER EUROPE	151	56	1,728	31	---	---	---
IRELAND	160	56	1,042	---	---	---	---
FINLAND	61	---	285	1	---	---	---
LATIN AMERICA	99	---	435	---	---	---	---
CACM	5	---	---	---	---	---	---
LAFTA	---	---	99	---	---	---	---
OTHER LATIN AMERICA	5	---	336	---	---	---	---
AFRICA	---	139	1,482	3	4	6	7
UNION S. AFRICA	27	98	305	---	---	---	---
GHANA	27	40	220	---	---	---	---
NIGERIA	---	1	368	---	---	---	---
ASIA	---	---	623	1	2	---	---
MALAYSIA INC. SINGAP	25	---	196	---	---	---	---
OCEANIA	---	---	406	---	---	---	---
NEW ZEALAND	---	---	338	---	---	---	---
OTHER	---	---	7				
	1	---					

EUROPEAN FREE TRADE ASSOCIATION
EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 265- VEGETABLE FIBERS EXC. COTTON AND JUTE							
WORLD	11,130	15,079	7,873	6,260	7,447	5,306	4,452
NORTH AMERICA	3,186	3,258	1,323	987	953	465	370
UNITED STATES	3,060	3,030	1,222	899	894	379	317
CANADA	126	228	101	88	59	86	53
EUROPE	7,255	10,953	5,741	4,558	6,074	4,393	3,721
EEC	3,310	7,538	3,520	3,025	3,610	1,879	1,658
BELGIUM-LUXEMBOURG	1,243	1,174	1,343	744	1,762	946	716
FRANCE	228	1,338	300	292	189	144	102
GERMANY	1,374	3,694	1,041	1,354	1,400	681	754
ITALY	299	497	631	404	171	71	22
NETHERLANDS	166	835	205	231	88	37	64
EFTA	733	775	597	721	1,100	1,020	544
AUSTRIA	79	30	45	47	77	221	128
DENMARK	98	102	88	214	257	256	108
SWEDEN	262	212	176	189	297	364	230
UNITED KINGDOM	195	166	226	155	371	81	20
EASTERN EUROPE	143	5	---	25	47	100	67
OTHER EUROPE	3,069	2,635	1,624	787	1,317	1,394	1,452
IRELAND	240	598	238	217	250	463	1,224
SPAIN	2,056	1,388	303	39	103	118	115
FINLAND	716	569	923	488	860	715	64
LATIN AMERICA	383	309	324	289	154	234	111
CACM	2	3	3	8	5	70	4
LAFTA	330	279	289	240	123	115	61
BRAZIL	300	197	102	53	31	---	---
OTHER LATIN AMERICA	51	27	32	41	26	49	46
AFRICA	184	362	148	223	111	36	73
ASIA	85	86	220	94	59	65	78
OCEANIA	33	109	110	106	98	112	95
OTHER	4	2	7	3	-2	1	4

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 2921 PLANTS FOR DYEING, ETC.							
WORLD	2,672			---	55	---	50
NORTH AMERICA	2	2		---	55	---	50
UNITED STATES	1	2		665	670	487	488
EUROPE	2,283	2,640		508	360	425	418
EEC	1,684	2,017		---	5	---	3
BELGIUM-LUXEMBOURG	5	16		3	3	18	70
FRANCE	57	47		505	352	407	345
GERMANY	1,396	1,796		---	---	---	---
ITALY	147	68		---	---	---	---
NETHERLANDS	79	90		152	248	59	70
EFTA	497	573		---	---	---	---
AUSTRIA	40	28		---	---	---	---
DENMARK	18	15		---	2	2	2
NORWAY	9	14		---	---	---	---
SWEDEN	56	75		152	181	57	47
SWITZERLAND	69	51		---	65	---	21
UNITED KINGDOM	303	387	---	2	---	1	---
EASTERN EUROPE	74	12		---	---	---	---
HUNGARY	41	---		3	62	2	---
OTHER EUROPE	28	38		---	60	---	---
IRELAND	15	26		---	1	1	2
LATIN AMERICA	4	5		---	---	---	---
CACM	1	---	---	---	1	1	2
LAFTA	3	5		---	---	---	---
OTHER LATIN AMERICA	---	---		---	---	---	1
AFRICA	2	8		---	---	---	---
ASIA	6	4		6	9	9	5
OCEANIA	8	10		6	9	9	5
AUSTRALIA	8	10					
OTHER		3					

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 411- ANIMAL OILS AND FATS							
WORLD	170,273	186,622	148,755	142,999	198,709	235,122	344,206
NORTH AMERICA	9,278	10,304	7,208	7,786	9,110	4,048	3,106
UNITED STATES	8,362	9,636	6,716	7,252	8,609	3,718	2,759
EUROPE	151,212	164,598	132,856	125,754	181,372	218,860	329,604
EEC	89,718	107,042	74,998	55,479	73,841	68,335	88,438
BELGIUM-LUXEMBOURG	1,378	3,859	1,082	1,589	1,692	1,560	4,958
FRANCE	13,699	24,432	2,604	3,589	6,900	4,195	6,705
GERMANY	50,920	48,537	40,867	27,524	29,750	38,132	38,392
ITALY	7,136	7,411	9,122	7,057	5,478	9,528	8,972
NETHERLANDS	16,585	22,803	21,323	15,720	30,021	14,920	29,411
EFTA	46,309	40,171	42,642	55,993	95,250	138,381	227,799
DENMARK	3,453	3,153	4,031	4,753	5,177	4,806	5,523
NORWAY	5,436	7,701	6,775	9,394	5,260	6,738	5,270
SWEDEN	5,797	10,715	9,733	3,561	4,487	3,335	10,404
UNITED KINGDOM	29,894	16,529	20,368	36,883	78,785	121,697	203,964
EASTERN EUROPE	7,589	9,001	8,936	8,304	6,502	4,717	6,772
CZECHOSLOVAKIA	4,801	5,502	5,142	3,933	3,311	2,300	1,870
OTHER EUROPE	7,596	8,384	6,280	5,978	5,779	7,427	6,595
SPAIN	2,546	3,333	2,822	2,161	1,952	1,579	2,543
FINLAND	2,269	2,247	2,095	2,533	2,050	4,716	3,309
LATIN AMERICA	3,947	5,502	2,177	2,717	2,128	2,148	2,207
CACM	61	122	79	83	106	82	53
LAFTA	2,643	4,326	1,648	2,037	1,618	1,851	1,667
OTHER LATIN AMERICA	1,243	1,054	450	597	404	215	487
AFRICA	1,800	2,893	3,932	4,030	3,511	6,084	5,701
ASIA	3,025	2,276	1,747	1,837	1,749	3,372	3,006
OCEANIA	999	1,053	834	871	826	603	588
OTHER	12	-4	1	4	13	7	-6

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 4113 ANIMAL OILS, FATS, EXC. LARD							
WORLD	35,353	48,562	47,801	46,384	50,439	64,004	70,844
NORTH AMERICA	2,451	1,817	653	774	540	558	392
UNITED STATES	1,989	1,610	508	684	494	486	354
EUROPE	29,626	39,969	42,416	40,727	46,081	56,602	63,803
EEC	20,180	30,477	31,109	28,966	33,532	40,399	50,284
BELGIUM-LUXEMBOURG	678	646	366	892	1,068	1,068	1,373
FRANCE	1,244	761	1,027	792	1,196	983	703
GERMANY	10,209	19,747	17,941	17,431	19,976	23,615	27,567
ITALY	2,645	2,437	3,936	2,708	1,911	4,206	3,903
NETHERLANDS	5,404	6,886	7,839	7,143	9,381	10,527	16,738
EFTA	4,885	5,655	6,916	7,223	8,290	10,391	10,514
DENMARK	727	1,373	2,483	3,007	2,878	2,814	3,013
NORWAY	1,520	1,476	2,029	1,995	1,945	2,435	2,631
SWEDEN	1,632	779	787	484	324	830	605
UNITED KINGDOM	537	1,339	1,240	1,360	2,614	3,658	2,900
EASTERN EUROPE	479	990	2,032	1,610	1,223	1,027	961
HUNGARY	141	212	396	743	589	881	947
OTHER EUROPE	4,082	2,847	2,359	2,928	3,036	4,785	2,044
IRELAND	762	1,021	477	810	1,052	760	341
SPAIN	1,465	788	1,018	1,465	1,285	966	394
FINLAND	1,790	927	641	593	634	3,041	1,285
LATIN AMERICA	1,143	3,775	871	665	320	267	476
CACM	3	64	14	21	38	19	3
LAFTA	903	3,202	739	348	104	137	79
COLOMBIA	625	2,918	576	120	11	21	3
OTHER LATIN AMERICA	237	509	118	296	178	111	394
AFRICA	885	2,080	3,426	3,622	3,119	5,802	5,472
UNION S. AFRICA	239	299	690	546	609	714	669
EGYPT	397	679	773	904	1,109	1,864	1,110
ASIA	1,108	675	391	563	329	737	667
OCEANIA	132	245	44	27	43	39	38
OTHER	8	1	---	6	7	-1	-4

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 421- FIXED VEGETABLE OILS, SOFT							
WORLD	49,203	97,166	95,960	72,024	73,019	62,054	81,286
NORTH AMERICA	5,237	6,553	5,223	1,693	1,532	4,386	1,966
UNITED STATES	1,703	1,900	1,740	1,543	1,454	2,655	1,730
CANADA	3,534	4,653	3,483	150	78	1,731	236
EUROPE	34,242	66,636	71,705	49,465	50,376	33,612	39,345
EEC	14,170	40,744	46,308	17,326	20,788	11,570	22,808
GERMANY	9,230	14,303	25,958	7,455	7,645	3,741	9,455
ITALY	1,758	13,879	2,736	321	200	1,482	913
NETHERLANDS	2,899	11,803	16,805	9,440	12,737	6,274	12,264
EFTA	14,872	20,236	17,183	18,144	16,632	14,298	12,521
AUSTRIA	941	3,364	2,276	1,422	2,559	2,003	137
NORWAY	1,514	4,371	3,187	382	560	320	1,780
SWEDEN	10,400	8,267	7,523	10,153	6,507	11,185	10,447
UNITED KINGDOM	988	3,580	2,098	4,636	5,133	37	15
EASTERN EUROPE	2,731	---	2,733	8,591	6,693	1,023	15
POLAND	---	---	---	1,017	3,800	1,016	---
CZECHOSLOVAKIA	1,205	---	1,822	5,915	2,001	3	5
OTHER EUROPE	2,469	5,656	5,481	5,404	6,263	6,721	4,001
SPAIN	2	2,765	535	690	1,426	4,928	1,701
BRIT. AOC	2,260	2,710	3,724	4,529	4,082	1,654	2,186
LATIN AMERICA	2,087	6,362	4,825	3,395	4,112	5,707	11,241
CACM	---	---	---	1	---	---	---
LAFTA	1,726	5,911	4,318	2,141	3,128	4,780	9,522
BRAZIL	335	1,675	522	268	392	924	2,152
CHILE	1,038	1,468	1,227	1,573	1,704	2,783	3,661
ECUADOR	---	2,194	2,327	50	440	600	2,786
OTHER LATIN AMERICA	361	451	507	1,253	984	927	1,719
AFRICA	4,912	11,566	8,509	7,508	9,722	12,176	15,341
MOROCCO	---	4,002	12	---	---	2,006	---
ALGERIA	---	---	1,000	---	1,219	1,033	2,469
TUNISIA	---	798	488	---	1,016	3,030	---
ANGOLA	2,959	3,271	3,198	3,969	3,484	3,615	4,293
MOZAMBIQUE	1,171	1,095	1,111	1,428	1,363	1,560	1,589
BR. AOC AFR. NES	4	1,624	507	1,203	1,081	482	2,649
ASIA	1,350	3,500	1,862	6,997	3,856	2,877	9,511
BURMA	8	30	4	4,319	46	7	1,524
CYPRUS	1,056	1,268	969	471	1,303	1,870	404
OCEANIA	1,344	2,532	3,815	2,939	3,407	3,268	3,856
AUSTRALIA	1,183	2,122	3,298	2,233	2,243	2,542	3,458
OTHER	31	17	21	27	14	28	26

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 422- OTHER FIXED VEGETABLE OILS							
WORLD	25,564	33,373	18,930	17,741	13,431	16,056	
NORTH AMERICA	7,960	12,420	16,512	3,975	5,086	1,379	1,360
UNITED STATES	1,858	6,520	9,688	259	479	620	367
CANADA	6,102	5,900	6,824	3,716	4,607	759	993
EUROPE	13,311	6,840	10,580	9,969	6,731	6,096	8,597
EEC	1,840	1,660	3,050	3,468	1,084	2,010	2,276
FRANCE	132	13	312	286	341	291	234
GERMANY	1,350	1,197	1,986	1,877	286	413	329
ITALY	64	69	120	649	34	1,035	485
NETHERLANDS	125	281	503	459	152	138	1,148
EFTA	5,535	4,004	4,602	4,797	3,301	1,464	2,427
AUSTRIA	184	34	570	224	293	163	548
DENMARK	3,160	1,038	570	200	139	135	75
NORWAY	454	649	517	193	75	390	571
SWEDEN	1,170	1,811	2,465	2,943	2,367	460	871
SWITZERLAND	187	52	63	703	126	23	140
UNITED KINGDOM	203	207	248	385	242	224	162
EASTERN EUROPE	4,052	274	1,531	151	149	1,463	2,302
GERMANY EAST	3,408	---	---	---	---	---	---
POLAND	420	5	781	---	---	1,388	2,288
HUNGARY	204	267	706	150	6	13	5
OTHER EUROPE	1,884	902	1,397	1,553	2,197	1,159	1,592
IRELAND	503	303	602	748	1,516	619	580
SPAIN	165	140	270	338	239	275	513
LATIN AMERICA	1,981	1,137	605	822	524	614	494
CACM	38	68	48	64	36	51	34
LAFTA	1,083	444	146	373	109	179	63
OTHER LATIN AMERICA	860	625	411	385	379	384	397
BR. TERR. AM. NES	574	597	49	84	94	130	111
AFRICA	1,566	1,822	1,531	1,412	1,881	1,456	1,510
UNION S. AFRICA	436	526	203	142	196	233	122
GHANA	318	223	240	91	603	310	560
NIGERIA	145	145	131	186	252	252	229
ASIA	3,843	2,636	2,832	1,839	2,888	3,511	3,497
JAPAN	---	9	309	290	689	806	1,114
PAKISTAN	186	375	209	69	122	249	188
MALAYSIA INC. SINGAP	150	363	364	298	342	---	---
HONG KONG	468	438	287	308	275	202	116
PHILIPPINES	680	843	818	338	308	464	492
FED. SOUTH ARABIA	12	21	66	36	646	677	562
OCEANIA	902	711	1,308	904	624	373	594
AUSTRALIA	591	495	1,114	703	342	200	465
OTHER		-2	5	9	7	2	4

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 431- OILS AND FATS, PROCESSED							
WORLD	119,730	135,349	162,484	158,121	173,274	180,926	168,287
NORTH AMERICA	3,658	2,792	1,868	1,235	1,457	1,807	1,894
UNITED STATES	3,294	2,356	1,471	861	967	1,538	1,590
EUROPE	97,969	110,928	137,765	56,483	145,330	151,656	138,490
EEC	27,257	27,262	29,028	22,423	31,603	28,344	32,254
FRANCE	7,639	7,931	9,146	4,525	9,201	6,233	4,479
GERMANY	11,991	10,163	9,834	11,220	15,773	15,751	11,650
ITALY	4,808	5,172	5,922	3,083	4,077	3,063	5,063
NETHERLANDS	1,838	3,487	3,337	2,632	1,784	2,493	10,357
EFTA	22,257	33,175	39,167	23,849	52,356	61,040	69,551
AUSTRIA	1,862	1,683	1,835	1,504	1,828	2,739	2,743
DENMARK	2,578	4,813	8,187	7,096	11,558	11,297	14,409
NORWAY	1,509	3,414	3,341	2,771	1,774	2,121	3,836
SWEDEN	5,093	4,807	4,684	4,461	4,649	4,754	5,454
SWITZERLAND	1,291	1,950	1,727	1,195	2,112	1,856	1,487
UNITED KINGDOM	9,606	16,077	18,819	6,069	29,833	37,580	40,889
EASTERN EUROPE	42,123	42,639	59,997	3,753	52,019	53,967	28,432
USSR	30,603	24,187	35,885	---	32,358	27,653	10,211
POLAND	3,894	6,206	5,879	1,256	9,128	13,235	7,586
CZECHOSLOVAKIA	5,902	9,731	14,428	131	5,361	6,190	4,770
HUNGARY	268	982	1,222	442	2,920	3,411	3,383
OTHER EUROPE	6,332	7,852	9,573	6,458	9,352	8,305	8,253
IRELAND	3,374	4,303	5,543	2,314	3,306	3,390	2,715
FINLAND	1,893	1,279	1,464	2,086	2,977	2,196	2,254
LATIN AMERICA	6,180	9,265	9,319	3,298	8,252	8,119	7,144
CACM	824	1,126	1,331	419	553	547	298
LAFTA	1,879	4,787	3,206	1,332	2,194	1,942	1,380
OTHER LATIN AMERICA	3,477	3,352	4,782	1,547	5,505	5,630	5,466
AFRICA	3,918	3,300	3,581	3,004	6,302	6,701	7,515
ASIA	7,425	8,491	9,158	7,638	10,750	11,689	12,097
OCEANIA	584	559	779	1,124	1,191	944	1,149
OTHER	-4	14	14	85,339	-8	10	-2

EUROPEAN FREE TRADE ASSOCIATION

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 5511 ESSENTIAL OILS, ETC.							
WORLD	1,245	1,345	555	594	854	1,009	1,040
NORTH AMERICA	83	91	41	59	70	69	57
UNITED STATES	72	78	36	52	61	61	52
EUROPE	639	710	330	347	576	670	627
EEC	404	434	241	229	290	308	261
BELGIUM-LUXEMBOURG	35	29	22	4	4	14	17
FRANCE	57	73	36	56	54	121	82
GERMANY	179	222	121	131	196	129	95
ITALY	99	79	30	18	16	24	35
NETHERLANDS	34	31	32	20	20	20	32
EFTA	127	153	54	68	110	84	73
SWEDEN	26	28	8	4	8	11	6
SWITZERLAND	11	6	7	14	12	10	12
UNITED KINGDOM	47	68	19	33	75	51	33
EASTERN EUROPE	29	25	10	19	23	33	12
OTHER EUROPE	79	98	25	31	153	245	281
IRELAND	15	12	8	9	15	12	16
SPAIN	22	41	12	14	129	223	245
FINLAND	18	17	4	5	6	5	15
LATIN AMERICA	127	130	14	26	27	40	32
CACM	8	8	---	---	---	---	1
LAFTA	100	111	11	20	15	31	25
MEXICO	25	22	4	5	8	8	4
OTHER LATIN AMERICA	19	11	3	6	12	9	6
AFRICA	144	169	94	81	74	124	158
UNION S. AFRICA	42	32	14	19	9	18	19
GHANA	21	30	42	20	17	20	39
NIGERIA	46	60	25	27	33	55	68
ASIA	196	194	39	56	73	65	132
JAPAN	35	39	16	11	16	18	32
PAKISTAN	32	19	2	3	4	3	4
THAILAND	16	23	2	4	8	8	8
OCEANIA	45	43	31	24	32	38	31
AUSTRALIA	35	35	22	15	26	30	25
OTHER	11	8	6	1	2	3	3
OTHER AFRICA			3,293	3,541	3,670	3,435	4,033

EXPORTS OF AGRICULTURAL COMMODITIES, QUANTITY BY DESTINATION, 1961-67

COMMODITY AND AREA	1961	1962	1963	1964	1965	1966	1967
			METRIC TON				
SITC 5995 STARCHES, ETC.							
WORLD			52,527	55,783	56,261	55,179	54,730
NORTH AMERICA			6,155	7,871	6,109	5,627	6,158
UNITED STATES			4,043	4,478	3,416	3,154	4,619
CANADA			2,112	3,393	2,693	2,473	1,539
EUROPE			31,343	31,720	35,559	35,947	34,960
EEC			5,997	5,820	6,475	7,005	8,751
BELGIUM-LUXEMBOURG			864	911	870	767	734
FRANCE			1,123	1,253	1,289	1,277	1,803
GERMANY			1,584	1,813	2,685	2,529	1,479
ITALY			1,345	1,101	992	1,170	1,180
NETHERLANDS			1,081	742	639	1,262	3,555
EFTA			14,751	13,684	15,664	13,414	16,336
AUSTRIA			868	1,156	1,243	1,803	2,924
DENMARK			2,065	2,349	2,201	2,608	2,509
NORWAY			2,965	2,460	2,022	2,081	2,039
SWEDEN			2,469	3,133	3,359	3,202	5,389
SWITZERLAND			1,002	1,124	1,292	1,462	912
UNITED KINGDOM	5,201	3,280	5,029	3,090	5,151	1,689	1,652
EASTERN EUROPE			1,601	2,171	2,463	1,790	1,208
ROMANIA	128		770	1,366	1,280	907	662
OTHER EUROPE			8,994	10,045	10,957	13,738	8,665
IRELAND			1,460	1,757	2,010	4,785	3,654
SPAIN			255	289	526	930	795
FINLAND			6,435	7,205	7,804	7,486	3,907
LATIN AMERICA			3,521	4,475	3,161	1,692	1,272
CACM			43	31	56	41	24
LAFTA			2,902	3,785	2,620	1,036	819
PERU			1,800	2,241	2,225	446	395
OTHER LATIN AMERICA			576	659	485	615	429
AFRICA			3,293	3,541	3,670	3,435	4,033
UNION S. AFRICA			695	585	547	439	539
NIGERIA			535	630	641	685	533
ASIA			3,941	4,344	3,258	4,133	3,800
OCEANIA			4,264	3,828	4,499	4,339	4,499
AUSTRALIA			1,439	1,391	1,676	1,532	1,492
NEW ZEALAND			2,810	2,424	2,804	2,785	2,983
OTHER			10	4	5	6	8

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PRODUCTION, CONSUMPTION, AND TRADE OF COARSE GRAINS

DEVELOPMENTS AND PROSPECTS FOR SELECTED FOREIGN COUNTRIES AND AREAS

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ECONOMIC RESEARCH SERVICE

U.S. DEPARTMENT OF AGRICULTURE

FOREWORD

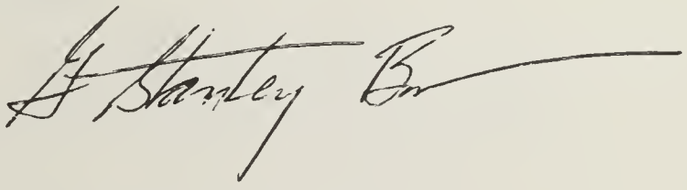
The United States is the world's major producer, consumer, and trader of coarse grains. Despite this preeminence, the grain policies of other nations have an impact on the United States. This is particularly true when the country happens to be a major importer or exporter of coarse grains.

Shifts in coarse grain production, consumption, and trade of other countries influence U.S. policy decisions in several ways. These "outside" developments have a bearing on the nature of the feed grains program pursued by the United States since the level of coarse grain production targeted annually depends in part on export possibilities.

Coarse grains are a major agricultural export of the United States and are highly important to our balance of payments. In 1966/67, the United States exported 21 million tons of coarse grains valued at $1.2 billion (excluding products)--nearly one-fifth of our agricultural exports. Six years earlier (1960/61), coarse grain exports from the United States totaled only 11.2 million tons valued at $539 million, one-tenth of our total agricultural exports.

This report looks briefly at trends in world production, utilization, and trade of coarse grains. The discussion centers on major coarse grain consuming or exporting countries (or regions) other than the United States and comments on trade prospects for 1970/71. An appraisal of probable developments in other countries or areas is designed to provide some insight into short-term problems (or opportunities) facing the United States in the world coarse grains market and on matters having a bearing on U.S. grain policy. This report also supports the ERS study for the Agency for International Development, "Analysis of Demand Prospects for Agricultural Products of the Less Developed Countries."

Persons assisting the authors in the preparation of this study include Mollie A. Church, Marshall H. Cohen, Brian D. Hedges, James Lopes, David M. Schoonover, Harry E. Walters, and Elizabeth V. Truhan.



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June 1969

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EXPLANATORY NOTES

Coarse grains -- Corn, barley, oats, rye, millet and sorghum, and mixed grains. Feed grains include the coarse grains listed, less rye.

Time reference -- Split-year data, such as July 1 to June 30, are identified with a diagonal stroke (1966/67). Hyphens indicate averages (1965-67).

Weights and measures -- Unless otherwise indicated, metric tons are used throughout this report.

1 metric ton = 2204.6 pounds
1 quintal = 220.46 pounds
1 kilogram = 2.2046 pounds
1 hectare = 2.471 acres

SUMMARY AND CONCLUSIONS

Expanding production abroad is threatening the traditional role of the United States as the world's major supplier of coarse grains. Member countries of the European Economic Community--along with the United Kingdom, Denmark, Spain, and Japan--accounted for three-fourths of world coarse grain imports in 1966/67. The continuing growth of domestic coarse grain production in all these countries, except Japan, dampens trade prospects for grain exporting countries, including the United States.

Even in Japan, there is strong evidence that increased availabilities of coarse grains by 1970/71 from countries such as Australia and Thailand will squeeze the traditional market share of other suppliers, particularly the United States.

High grain price policies pursued by some importing countries, such as the EEC, work against import expansion in two ways--domestic production is encouraged and the demand for feed grains is dampened.

The United States provided one-half of world coarse grain exports in 1966/67 and will continue as a major supplier in international markets. Argentina, Brazil, Mexico, Canada, Australia, Thailand, and the Republic of South Africa accounted for nearly three-fifths of the rest. The tremendous production potential of some of these exporting countries and the dependence of others on grain sales for export earnings augur for continued export expansion. Growth of the livestock and poultry industries in some countries, however, will tend to hold down increases in export availability.

Widespread crop failures or unusual acceleration in world demand--such as a sharp upturn in feed grain imports by Eastern Europe from the Free World or an unexpected thrust to livestock expansion--might increase world coarse grain imports above projected levels. Developments such as these seem unlikely and might be cyclical and/or short lived.

Net imports of coarse grains by major importers in 1970/71 are projected as follows:

EEC -- 10-12 million tons, somewhat below the 12.1 million tons of net imports in 1966/67 and the 12.5 million tons in 1965/66.

United Kingdom -- an amount approaching 4 million tons, somewhat above earlier levels, but with increased production nearly keeping pace with increased consumption.

Spain -- 2 million tons (nearly all in corn), about one-half million tons below the level of net imports of coarse grains estimated annually for 1967/68-1968/69.

Denmark -- a decline below the 0.4 million tons of net imports in 1965/66-1966/67 as production increases exceed consumption increases.

Japan -- an increase in net imports, from 6.5 million tons in 1965/66-1966/67 to 11 million tons in 1970/71, as domestic production continues to decline and consumption continues to increase.

Net exports of coarse grains by major exporters (excluding the United States) in 1970/71 are projected as follows:

Argentina -- increase in net exports of coarse grains above the level of 4.2 million tons in 1965/66-1966/67.

Brazil -- net exports of 1 million tons of corn, about double the level of 1965-67, with production increases exceeding consumption increases.

Mexico -- continuation of a net export position with exports of corn exceeding imports of other types of coarse grains.

Canada -- net exports of coarse grains are projected to remain just short of 1 million tons as consumption increases match production increases.

Australia -- net exports of all coarse grains may approach 1 million tons in 1970/71, up somewhat from the 0.8 million tons exported in 1965/66-1966/67.

Thailand -- Government policies directed toward expanding production of corn and sorghum will push net exports of coarse grains above the 1.2 million tons in 1967.

Republic of South Africa -- corn exports (net) are projected to reach 3 million tons, up sharply from the one-half million tons of corn exported in 1963/64-1965/66.

Projections of net trade for Eastern Europe and the USSR are as follows:

Eastern Europe -- net imports of nearly 1.5 million tons of coarse grains projected for 1970/71, about equal to net imports in 1961-65, as opposed to small net exports in 1965/66-1967/68 (0.2 million tons).

USSR -- net exports of slightly over one-half million tons of coarse grains in 1965/66-1967/68 are projected to increase to nearly 1 million tons in 1970/71.

U.S. exports of feed grains will continue to expand as will world feed grain exports. However, the United States will face increased competition from other exporters.

U.S. exports of feed grains in 1970/71 will increase from the 20-21 million tons exported in recent years. However, exports are not expected to reach the unusually high level of 25.4 million tons exported in 1965/66.

PRODUCTION, CONSUMPTION, AND TRADE OF COARSE GRAINS: DEVELOPMENTS AND PROSPECTS FOR SELECTED FOREIGN COUNTRIES AND AREAS

By

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INTRODUCTION

The decline in the world and U.S. price of feed grains--primarily corn, rghum, barley, and oats--is causing concern over future demand-supply equi- brium. Corn prices, c.i.f. European ports, are at their lowest level in over decade (app. fig. 1). Reasons for continued U.S. concern over the level of rld feed grain prices and feed grain export markets are explored in this re- rt.

World grain price trends reflect to some degree developments in supply- mand equilibrium. As shown in appendix figure 1, the international price of arse grains remained relatively stable between 1958 and 1961, after falling om peaks in the mid-1950's, and then gradually increased through 1966, pro- ding an incentive to increase production. This strengthening of prices re- ects a rapid expansion of the livestock industry in such areas as the Euro- an Economic Community and Japan, and increased movement of coarse grains orghum) to India for use as food. The U.S. feed grain program and related orage activities lent stability to world market prices. However, substantial rld grain production increases in 1966 and 1967 resulted in a fall in world rket prices for several of the most important feed grains, beginning in the tter part of 1966.

Trends in world grain stocks also reflect the relationship between supply d demand as conditioned by varying price policies. Grain stocks of major ain exporters showed a consistent year-to-year rise between 1954/55 and 61/62--from 35.8 million tons to 84.3 million tons (table 1). 1/ In 1961, e United States started a feed grains program designed to reduce feed grain reage and cut production to avoid further stock increases. This program, mbined with a rapid rise in world utilization of feed grains, caused stocks show a general decline between 1961/62 and 1967/68. The United States, ich most years since 1959/60 has accounted for about 90 percent of the stocks major coarse grain exporting countries, entered 1968/69 with a significant crease in stocks. The good grain crop in 1968 led the United States to an- unce adjustments in the feed grains program which would further curtail feed ain production.

1/ All tables are in the appendix, p. 38.

TRENDS IN THE PRODUCTION, UTILIZATION, AND TRADE OF COARSE GRAINS

Total world grain production advanced to nearly 1.1 billion tons in 1967 after exceeding the 1-billion-ton mark first in 1966 (table 2). Coarse grains account for almost half of total world grain output, with the remaining production about equally split between wheat and rice. World production of rye and oats has declined, while output of barley, corn, and millet and sorghum has increased. Rye output declined 1.2 percent and oats 2.9 percent annually between 1955-57 and 1965-67. Average annual percentage increases for other grains were: barley, 3.7 percent; corn, 3.8 percent; millet and sorghum, 3.9 percent. These trends brought the overall average annual increase in coarse grain output to 2.1 percent between 1955-57 and 1965-67--below the increase for wheat (2.7 percent) but above that of rice (1.7 percent).

Trends in Output of Individual Coarse Grains by Major Producing Areas

Rye accounted for only 6.3 percent of total coarse grain output in 1965-67 (31.3 million tons) and its relative importance continues to decline. The Soviet Union, Eastern Europe, and the EEC (principally West Germany) jointly produce over 88 percent of the rye crop (table 3). Although rye production fell in all three of these countries or areas during the 10-year period 1955-57 to 1965-67, the major decline was in the EEC (2.9 percent annually). Three of the major producing areas expanded production during the decade, but the largest percentage increase occurred in Canada.

Although rye is considered a coarse grain in this study, a substantial proportion of production is consumed as food. This is especially true in the major producing areas--USSR, Eastern Europe, and West Germany--where large amounts of rye are used in bread baking. However, rising levels of living are reducing the demand for rye as a food grain.

The proportion of barley in total coarse grain production increased from 16 percent in 1955-57 to nearly 19 percent in 1965-67 (92.5 million tons), an annual rate of increase of 3.7 percent.

Dramatic shifts have occurred in the proportions of barley supplied by major producers. In 1955-57, the United States and Canada jointly produced 22 percent of the world barley output, compared with 15 percent in 1965-67. Conversely, the proportion produced by the USSR increased from 16 to 23 percent, and Western Europe's share (excluding the EEC) increased from 14 to 26 percent. Significant gains were also made in the European Economic Community.

Sharp advances in the share of world barley production on the part of some countries are further documented in the annual rate of change in output. The United Kingdom's annual increase in production between 1955-57 and 1965-67 was nearly 12 percent and that of the Soviet Union almost 8 percent. Some producers, including the United States, showed declines in the reference period.

World oat production declined 2.9 percent annually between 1955-57 and 1965-67 (44.7 million tons), accounting for 15 and 9 percent of coarse grain production, respectively. The only major oat-producing area to show an increase in output of any significance was Oceania (primarily Australia). The largest annual decline in oat production was in the United Kingdom (6.6 percent), followed by Argentina (5.6 percent), the USSR (5.0 percent), and the United States (4.4 percent).

The United States, USSR, EEC, and Canada were the major world suppliers of oats in 1955-57 as well as in 1965-67. However, the U.S. and the USSR shares of world oat production have shown a significant decline. On the other hand, Canada and the EEC have increased their relative proportions.

World corn production has increased at a rapid pace--3.8 percent annually between 1955-57 and 1965-67 (211.9 million tons). Only one major producer--the USSR--showed declining production. Country or regional annual increases during 1955-57 to 1965-67 ranged from a high of over 8 percent in Canada and Argentina to 3.3 percent in Eastern Europe.

The United States has dominated corn production, accounting for over one-half of world output. Eastern Europe (primarily Yugoslavia) is the next major supplier of corn, with nearly one-tenth of world output. Most of the other major producing countries or areas each supply about 3 percent of world output. Increases in the proportion of corn supplied by major corn-producing areas were primarily at the expense of the Soviet Union.

World corn production increases reflect the acceptability of corn as an excellent feed for livestock as well as the improved profitability of growing corn through the adoption of hybrid varieties.

World production of millet and sorghum increased 3.9 percent annually between 1955-57 and 1965-67 (54.0 million tons). As a result, the share of these grains in total coarse grain output rose from 9 percent to nearly 11 percent.

Countries or areas with the most rapid rise in millet and/or sorghum production included Mexico and Argentina, followed at a substantial distance by the Republic of South Africa and the United States. All other major producing areas showed some annual increase in production.

The U.S. share of the world's combined production of sorghum and millet increased from less than one-fourth in 1955-57 to one-third in 1965-67. South Asia dropped from the leading producer in 1955-57 (41 percent of output) to a par with the United States. Another major producing area is West Africa where the relative share of world production also declined.

Coarse Grain Utilization

Aggregate world utilization figures are not available for coarse grains for recent years. 2/ Earlier data compiled by the Food and Agriculture Organization of the United Nations, as shown in table 4, indicate an annual increase in coarse grain utilization of 3.5 percent between 1955/56-1957/58 and 1961/62-1963/64 (6). 3/ Expansion of coarse grain output since 1962/63, combined with declines in stocks held by major exporting countries, is indirect evidence of further growth in utilization. Projections by the OECD point to continued expansion in coarse grain utilization in developed countries through 1985 (16).

In developed countries there has been a substantial decline in the amount of coarse grains going into food, but requirements for feed and industrial uses have risen. Developing countries have increased the amount of coarse grains used for all purposes. In 1961/62-1963/64, the developed countries used 6 percent of their coarse grain for food and 84 percent for feed. On the other hand, the developing countries consumed 65 percent of this coarse grain as food and fed only 23 percent to livestock.

The proportion of coarse grains going into livestock and poultry rations is growing. This area of derived demand will become increasingly important in determining future coarse grain requirements. But growing sophistication in the compound feed industry, particularly in Japan and the EEC, will promote further substitution among various feed concentrates, including grains. The use of grain substitutes is growing (e.g., increased use of corn gluten meal, protein meals, tapioca meal, sugar, etc.) and many of these substitutes are likely to offer an increasing challenge to feed grains. This development has already been forcefully demonstrated in the Netherlands where feed use of grains has declined substantially in recent years despite a significant increase in the number of animal units.

A high degree of interchangeability technically exists among individual grains used for feed but, in practice, less substitution between grains takes place in reaction to price change than would seem justified (5). Substitution among grains tends to increase when a large proportion of feed grain requirements are purchased on the market and greater use is made of compound feeds.

Trade in Coarse Grains

Table 5 shows that international trade in coarse grains more than doubled between 1956/57-1957/58 and 1964/65-1965/66--from 18.3 million tons to 38.4 million tons. Despite these expanded shipments, the amount of coarse grains enter-

2/ A 1968 report prepared by the Organization for Economic Cooperation and Development shows coarse grain availabilities in 1961-63 and projections of utilization to 1975 and 1985 for OECD member countries, Australia, and New Zealand (16).

3/ Underscored figures in parentheses refer to the Bibliography, p. 36.

ing international markets still amounted to less than 10 percent of total coarse grain production in 1964/65-1965/66. The bulk of the coarse grain is consumed where grown. Rapid increase in livestock production in the developed grain importing countries has stimulated import demand (see table 6 for grain import data). On the export side, a large part of the expanded world trade was shipments of corn and sorghum from the United States. However, a number of other countries--including Argentina, Republic of South Africa, and France--have also sharply expanded coarse grain exports.

Trends in Individual Coarse Grain Exports of Major Producing Countries

Rye has not shared in the general expansion of international trade in coarse grains (table 7). In fact, world exports of rye in recent years have been about one-half the level of 1951/52-1955/56. The share of rye shipments by major exporters--the United States, Argentina, Canada, West Germany, Sweden, and the USSR--has generally declined. Although substantial year-to-year fluctuations are evidenced in the rye exports of each major shipper, all countries except the United States have shown a decline in the level of exports since 1951/52-1955/56.

World exports of barley have remained relatively stable from 1956/57 to 1965/66. As a result, the share of barley in coarse grain exports has declined. Major shipping countries usually account for around 80 percent of world exports. Exports of Argentina and Canada have fallen; France and, more recently, the United Kingdom have emerged as major exporters of barley.

World shipments of oats during 1956/57-1966/67 were below the 1.6-million-ton average in 1951/52-1955/56 for all but 1 year. The share of exports by the four major world shippers--United States, Canada, Argentina, and Australia--has tended to decline. Relating 1966/67 shipments to the early fifties indicates that Canada is primarily responsible for the decline.

Exports of corn quadrupled between 1956/57 and 1965/66--from 6.6 to 26.1 million tons. During this period, the share of corn in exports of major coarse grains increased from 37 to 62 percent. The United States is the major shipper of corn, accounting for nearly 60 percent of total exports in 1964/65-1966/67. Another 15 percent was supplied by Argentina.

Mexico, Brazil, Thailand, and France have emerged as major exporters of corn, although shipments by Mexico and Brazil are on a sporadic basis. On the other hand, the relative importance of Yugoslavia as an exporter of corn has declined sharply since the late fifties. Shipments by the Republic of South Africa also fluctuate sharply because weather variability causes wide year-to-year swings in production.

Pre-World War II (1934-38) exports of sorghum amounted to 618,000 tons, over half of which was supplied by Mainland China (5). During the postwar period, world exports of millet and sorghum have increased rapidly, while Mainland China's exports have become negligible. The United States was responsible for 70-80 percent of world exports of millet and sorghum for most years during 1956/57-1965/66. The second major world supplier of millet and sorghum is Argentina, which has also expanded production quite substantially since the early

fifties. Other exporters of less importance include the Sudan, Republic of South Africa, Morocco, and Australia. Major exporters account for around 95 percent of world exports of millet and sorghum. In 1965/66, millet and sorghum represented 17 percent of the world trade in coarse grains, compared with 11 percent during the first half of the 1950's.

The expansion in world sorghum trade reflects the introduction of high-yielding varieties in the United States and the increased use of sorghum in the feed compounding industry (5). Main importers of sorghum have been Western Europe and Japan where rapid expansion of mixed feed production is occurring. However, the threshold prices (minimum import prices) set by the EEC on feed grains have led to export problems for sorghums. The price differentials do not fully reflect the generally accepted differences in market and feeding values between sorghum and other feed grains.

NEAR-TERM DEVELOPMENTS FOR MAJOR COARSE GRAIN IMPORTING AND EXPORTING COUNTRIES

This section provides an evaluation of probable developments to 1970/71 in the production, utilization, and trade of coarse grains for selected major importing and exporting nations. Data shown in table 8 provide some guide to the "most likely" estimates for 1970/71 and support the increased concern about near-term international market possibilities. Expected developments in such factors as policy, technology, prices, and changing feed requirements are taken into account. The focus of the report is to show the general trend of developments in grains rather than to provide quantitative projections. The reader should be alerted to the fact that discussion sometimes shifts quickly from total grains to coarse grains. A general assumption of the study is that "normal" weather conditions will prevail in 1970/71.

As indicated earlier, the United States is vitally concerned with major world developments in feed grain production, consumption, and trade. Consequently, there is a need to appraise the near-term possibilities of expanding feed grain trade and the competition likely to be faced by the United States. Total U.S. exports of feed grains (excluding grain products) rose sharply from 17.5 million tons in 1964/65 to 25.4 million tons in 1965/66 and then declined to 20.8 million tons in 1966/67 and an estimated 19.7 million tons in 1967/68.

European Economic Community 4/

The European Economic Community (EEC) is the world's major coarse grain importer. Implementation of the Community's common agricultural policy for grains is stimulating increased production of grains, particularly in France. This is being accomplished through high target prices protected by variable import levies. No controls are imposed on grain output and provisions

4/ European Economic Community (EEC), European Community, Community, and Common Market are interchangeable terms in this report. Full members are West Germany, France, Italy, Netherlands, Belgium, and Luxembourg.

are made for heavy subsidies on any grain exports to non-EEC countries. A surplus of soft wheat is being produced and larger amounts may be substituted for coarse grains in livestock feed. More fertilizer and better grain varieties are leading to higher yields. Area expansion of higher yielding corn and barley will continue at the expense of oats and rye. The recent relatively rapid rate of expansion in livestock and poultry numbers is expected to show some deceleration as a greater level of self-sufficiency in most animal products is achieved. Grain substitutes will loom large as a threat to the grain trade due to high grain prices. All these developments point to a decline in coarse grain imports by 1970/71.

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Past Trends in Production 5/

Coarse grain output in the EEC increased 26 percent between 1955-57 and 1965-67. Comparable percentages for individual grains were: barley, 81; corn, 59; rye, -26; and oats, -18. France is the major coarse grain producer in the EEC (48 percent in 1965-67) and its relative share of total Community production is increasing. Area planted to coarse grains in the EEC declined 3.7 percent between 1955-57 and 1965-67 (compared with a 2.2-percent decline in wheat area). Area declines are in rye and oats. France is the only EEC country with an increase in total coarse grain area between 1955-57 and 1965-67.

Grain yields in the EEC in 1967 and 1968 were substantially above average, aided by generally favorable weather. Yields also increased significantly during 1955-57 to 1965-67, as indicated by the following figures (in percentages): rye, 14; barley, 25; oats, 30; and corn, 41.

Factors Affecting Production

The Common Agricultural Policy (CAP) of the EEC is stimulating increased Community production of grains. This is being accomplished through high target prices, variable import levies, and a domestic price support system. No controls are imposed on grain output, and provisions are made for heavy subsidies on grain exports to non-EEC countries if surpluses occur.

Grain prices agreed to in December 1964, and effective on July 1, 1967, when the grains market was harmonized, were later increased for coarse grains to provide a further price incentive for larger outputs of barley and corn.

The aggregate use of mineral fertilizers in the EEC has shown a significant increase. Between 1955/56-1957/58 and 1966/67, the use of nitrogen in-

5/ Unless otherwise stated, rice is excluded from the analysis in the country or regional statements.

creased 90 percent, phosphates nearly 50 percent, and potash 36 percent (all in terms of plant nutrients). Member countries show a wide diversity in the application of fertilizer per acre. Applications are highest in the Netherlands and Belgium with France and Italy at the lower end of the scale. Rates of fertilizer application in France, however, vary substantially by region and are highest in the north (the major grain area).

The member countries of the EEC are actively involved in developing new and improved plant varieties. Improved strains of barley have been developed in France and Holland, and hybrid corn is being planted on a wide scale in Italy and France.

Despite the small size of farms in the EEC, mechanization has been proceeding at a rapid rate since 1950. Numbers of tractors and combines have more than quadrupled. Increased mechanization permits timeliness in planting and harvesting activities. Nevertheless, the small size and fragmentation of farms in the EEC compel many farmers to farm intensively (e.g., dairying) rather than extensively (e.g., grains).

Utilization

The use of coarse grains for feed in the EEC has expanded at a faster rate than has domestic production. In 1966/67, coarse grains consumed as feed exceeded domestic production by 4.2 million tons, or by 13 percent (total use exceeded domestic production by 12.3 million tons). Of coarse grain supplies (production minus exports plus imports), 81-82 percent are used as feed while approximately one-fifth of the wheat produced in the EEC is used for feed. France and West Germany account for over 95 percent of the wheat fed to livestock in the Common Market.

Wheat moves into feed use in the EEC by one of two methods--through direct "on farm" use without benefit of subsidy and through the use of premiums for denaturing. The quantity of wheat denatured by the various EEC countries seems to hinge on the availability of export markets for wheat, the quality of the wheat produced, and the amount of the denaturing premium.

Grain feeding in the EEC has increased because of the growth in livestock numbers and in the quantity of grain fed per animal. Livestock and poultry numbers are continuing to expand although at a reduced rate. Grain fed per animal unit is still rising but at a decelerating rate.

The high cost of feed grains in the EEC is leading to increased use of grain substitutes, including grain byproducts, molasses, and high protein meals. This trend is most pronounced in the Netherlands where linear programing is being used extensively to determine formulas in the mixed feed industry. Expansion of the mixed feed industry in the Common Market is facilitating increased use of grain substitutes.

Trade

Net imports of coarse grains by the EEC more than doubled between 1955/56 and 1966/67--from 5.8 to 12.1 million tons. This import trade reflects a growing preference for corn over other feed grains available on international markets. The U.S. share of the Common Market's coarse grain imports averaged 52 percent in 1963/64-1965/66, compared with 35 percent in 1955/56-1957/58. However, substantial variation occurs from year to year in the U.S. share. Between 1955/56-1957/58 and 1965/66-1966/67, intra-EEC trade in coarse grains more than tripled, while imports from nonmember countries doubled.

France has emerged as an important exporter of both wheat and feed grains. Feed grain exports totaled 3.8 million tons in 1966/67, nearly all of which were corn and barley.

Projections 6/

Coarse grain production in the EEC in 1970 is expected to total 36-38 million tons (the record harvest of 1968 is estimated at over 37 million tons). The top range of the estimate assumes generally favorable weather, higher grain yields by way of using more fertilizer, a wider adoption of the better grain varieties, and further expansion of higher yielding corn and barley at the expense of lower yielding oats and rye.

Food and industrial uses of grain remain fairly stable from year to year; thus, the critical component in estimating future grain utilization trends in the EEC is feed use. A recent slowing in the expansion of livestock and poultry numbers, a tendency to substitute grain byproducts and other concentrated feedstuffs for grains, and high feed grain prices in the Common Market may lead to near-term slackening in the rate of increase in grain requirements. Total coarse grain utilization in 1970/71 is estimated at 48 million tons. 7/

The estimate of the Common Market's net imports of coarse grains in 1970/71 is 10-12 million tons. This compares with net imports of 12.1 million tons in 1966/67, 12.5 in 1965/66, and 9.4 in 1964/65.

United Kingdom

The agricultural policies of the United Kingdom have stimulated domestic grain production through a system of support payments and minimum import prices. As a result, production of coarse grains has increased. Both area and yield are up, and although the demand for coarse grains has increased significantly, production has increased sufficiently so that import re-

6/ A number of studies carry projections for individual member countries (13, 17, 18, 20).

7/ A recent proposal by the EEC Commission to impose a heavy tax on vegetable oils and protein meals could lead to increased utilization of grains for feed in the Community. However, it is the intention of the Community that the only expansion in grain use for feed should be that of domestically produced surplus soft wheat.

quirements have declined. Policies growing out of efforts to ease an unfavorable balance of payments may result in a further decline in coarse grain imports by 1970/71.

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Past Trends in Production

Total grain output in the United Kingdom increased 62 percent between 1955-57 and 1965-67--from 8.6 to 14.0 million tons. Output in 1967 reached a record 14.6 million tons. Although the forecast is for somewhat lower production in 1968, it is still expected that total grain production will exceed 14 million tons.

Most of this increase can be attributed to increased production of barley. Although output of barley in 1955-57 was only 2.9 million tons, by 1965-67 production had risen to 8.8 million tons, an increase of nearly 200 percent. On the other hand, output of rye, oats, and mixed grain has been declining. The United Kingdom does not produce corn commercially.

The increases in grain production can be attributed to expansion in both area and yield. From 1955-57 to 1965-67, grain area in the United Kingdom increased 736,000 hectares, or roughly one-fourth. The area devoted to wheat increased from an average of 857,000 to 955,000 hectares, while the area devoted to coarse grains increased from 2.2 million to 2.8 million hectares. The area in rye, oats, and other grains declined, but the area devoted to production of barley grew from 977,000 to 2.4 million hectares, or by 142 percent.

Increased use of advanced technology has resulted in significant increases in the yields for all grains. The largest increases were recorded for oats and rye. However, yields per hectare for barley grew almost 30 percent during the period between 1955-57 and 1965-67.

Factors Affecting Production

The agricultural policies adopted by the United Kingdom have been conducive to increases in domestic agricultural production. In the case of grain, increases in domestic production are encouraged by a system of deficiency payments under which the Government pays the farmer the difference between the market price and a Government-supported minimum price. In 1964, a system of minimum import prices was announced for grain to provide further protection for the level of farm prices in the United Kingdom.

Total consumption of all commercial fertilizers, in terms of plant nutrients increased from nearly 1 million tons in 1955/56 to over 1.5 million tons in 1965/66. The most significant increase was recorded in the use of nitrogenous fertilizers. Despite these increases, the United Kingdom still ranks well below many other West European countries in per acre use of commercial fertilizers. The possibility exists, therefore, that production per acre may be increased further through more intensive application of fertilizer.

Perhaps the best measure of mechanization is the rate of increase in number of tractors. In 1950, there were 332,000 tractors recorded in Great Britain (comparable statistics are not available for the United Kingdom). 8/ By 1964, this number had increased to 496,000. Even more substantial increases have been recorded in the number of pieces of other field equipment essential to grain production in the country.

Plant breeders in the United Kingdom have provided improved strains and varieties of plants which are not only capable of higher yields, but are resistant to diseases and lodging and make it profitable to use heavier applications of fertilizer. Use of improved varieties has also contributed to increased grain yields.

Because of their larger size, farms in the United Kingdom can generally make more effective use of modern farm machinery and equipment than farms in continental Europe. Approximately 36 percent of all farms in the United Kingdom are at least 20 hectares in size; an additional 25 percent are between 6 and 20 hectares. In contrast, only about 13 percent of the farms in the EEC are larger than 20 hectares.

Utilization

Demand for coarse grains in the United Kingdom, primarily for feed, has increased significantly, reflecting the increase in livestock numbers in the country. In 1965-67, the demand averaged nearly 13 million tons. Most of the total supply (over 75 percent in 1965-67) is used for livestock feed, although the demand for seed and industrial use has been increasing. Barley is used in the largest quantities for livestock feed, followed in importance by corn (all imported), oats, and sorghum (all imported).

The available supply of wheat has fluctuated widely--from a high of 8.2 million tons in 1954/55 to a low of 7.3 million tons in 1961/62. The largest share of the available supply of wheat in the United Kingdom is still consumed as human food (70 percent in 1966/67), although the consumption of wheat for food has been declining. The use of wheat for livestock feed during this period varied from 20.4 to 33.8 percent of the total supply, depending on the size and quality of the harvest. In 1965/66, for example, when the poor quality of the harvest rendered a large portion of domestic wheat production unsuitable for anything but livestock feed, the amount of wheat used for livestock feed increased 20 percent.

Trade

The United Kingdom is an important importer of grain. However, since 1961/62, imports have been declining. During the period 1964/65-1966/67, the average level of imports declined to 8.5 million tons, compared with an average of 9.5 million tons during 1958/59-1960/61. Wheat normally constitutes at least

8/ Great Britain consists of England, Scotland, and Wales. Northern Ireland is not included.

50 percent of U.K. grain imports. It is followed in importance by corn, millet and sorghum, and barley.

Projections

Jones et al., Oxford University, recently completed a supply and demand study of the United Kingdom (11). This study contains projections to 1970 (and 1975 and 1980) for grains as well as a number of other agricultural products. The projections for 1970 assumed a continuation of current agricultural policies, with some decline in the level of Government supports. The base period of the study is 1959-63.

The United Kingdom's National Plan places grain output in 1970 at 16.3 million tons, net of seed. Jones forecasts 1970 production of wheat, barley, and oats at 13.7 million tons (compared with a yearly average of 9.4 million tons in 1959-63). The total grain area in 1970 is projected by Jones to increase only moderately from 1966, but grain yields are projected to increase 1.5 percent annually until 1970.

Utilization of grain for feed is projected by Jones to increase from 10.9 million tons annually in 1959-63 to around 14 million tons in 1970. Food and industrial uses are also expected to increase but the major absolute increase will be for feed.

With regard to grain import requirements, the study concludes: "....It is difficult to see any rise in the requirement for grains; even though the demand for maize is (projected to be) up by 1970 in view of specific uses in poultry feed and industry, it may be displaced by still higher supplies of domestic grain for feed purposes."

A report issued by the Economic Development Committee for Agriculture, established to study the possible import-saving role of agriculture, proposed a large increase in grain production--about 3.5 million tons--between 1967/68 and 1972/73 (15). The Minister of Agriculture modified the EDC goals, indicating that because the additional land required would involve movement into less fertile areas and because of uncertainty of such factors as weather, actual production will probably fall far short of the EDC proposals. Despite the Minister's modification, a large increase in grain production still can be expected.

Spain

Spain aims at self-sufficiency in grains and is implementing policies to reduce wheat surpluses and to increase production of coarse grains, mainly through a shift in grain area from wheat to barley. About 10 percent of the grain area is under irrigation where fertilization rates may be significantly increased. Expansion of livestock and poultry raising in recent years has sharply increased feed requirements; coarse grain imports nearly quadrupled between 1960-62

and 1965-67. Further increases in coarse grain use are expected to be more than met by production increases so that imports of coarse grains by 1970/71 will be below the level of imports (2.4 million tons) in 1967/68-1968/69. Imports of coarse grains in 1970/71 are expected to be nearly all in corn and sorghum, since Spain is expected to be self-sufficient in barley.

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Past Trends in Production

During 1965-67, aggregate grain production in Spain averaged 9.2 million tons, compared with 7.8 million tons a decade earlier. In 1968, total grain production rose to 11.6 million tons, about 1.3 million tons more than in 1967.

Coarse grain production during 1965-67 averaged slightly over 4.1 million tons--20 percent above a decade earlier. Preliminary data for 1968 shows coarse grain production slightly exceeding 6 million tons, including 3.7 million tons in barley and 1.5 million tons in corn.

About 7.0 million hectares annually were planted to grains during 1965-67. In 1968, total grain area was up to 7.4 million hectares. Coarse grain area in 1968 totaled 3.5 million hectares, nearly one-fourth above the average in 1965-67 but only 13 percent higher than in 1955-57. Slightly more than one-tenth of total grain area was irrigated in 1965-67--about one-half in wheat and more than one-third in corn.

There were significant increases in grain yields between 1955-57 and 1965-67 as a result of expansion of irrigated area, improved farming practices, and use of better quality seed. However, the sharp rises in grain yields in both 1967 and 1968 are attributed primarily to very favorable weather.

Factors Affecting Production

Spain has become a surplus producer of wheat and is aiming at self-sufficiency in coarse grains to reduce import requirements. In the past 3 years, there has been increased emphasis on production of coarse grains and on reduction of wheat surpluses. The Government uses price support programs, programs of financial assistance, market arrangements between producers and processors, and other programs to encourage production of grains.

Most coarse grains are still largely sown and harvested by hand. Wheat, although usually hand sown, has been mechanically harvested for many years (the emphasis given to wheat production until 1965 promoted harvest mechanization). Greater use of fertilizer on nonirrigated land, which produces most of the nation's grains, is limited because of possible damage to crops in years of drought. However, some grain is grown on irrigated land where rates of fertilization may be significantly increased. A high degree of fragmentation of farms in the major corn-producing areas of the north will handicap output expansion of this grain.

Utilization

Total utilization of coarse grains increased from an average of 3.5 million tons a year in 1955-57 to 7.1 million tons a year in 1965-67--6.0 million tons of which were used for feed. Expansion of livestock (particularly hogs) and poultry raising has sharply increased feed requirements.

Trade

Imports of coarse grains during 1965-67 averaged slightly more than 3.0 million tons per year, nearly a fourfold increase over the average in 1960-62. Corn is the principal feed grain import. The United States has been Spain's major supplier of coarse grains. Spain has shifted from a net wheat importer in the early 1960's to a net exporter in recent years.

Projections

Total grain production in 1970 is estimated at 11.5 million tons, including almost 6.7 million tons in coarse grains. This represents nearly a 1-million-ton increase in coarse grains and a 1-million-ton decrease in wheat production from the 1968 levels.

Because of expected increases in the production of pork and poultry meat, feed utilization of coarse grains in 1970 is estimated at 7.3 million tons--more than 1 million tons over the 1965-67 average and about 700,000 tons more than in 1968. Direct consumption of wheat will continue to decline as per capita income rises. The use of wheat for feed in 1970 is not likely to exceed 500,000 tons as a result of expected cuts in surplus wheat production.

Spain's imports of coarse grains in 1970/71 are expected to total around 2 million tons, nearly all in corn.

Denmark

Denmark adjusted its agricultural policies in 1967, reinforcing factors causing a shift from bread grains to feed grains, particularly barley. Barley area has expanded rapidly. Yields of all major grains are among the highest in Western Europe. The feeding of coarse grains to livestock has increased 50 percent over the past decade, and barley now constitutes about 70 percent of total feed grain consumption. Barley imports are expected to cease by 1970/71, while corn imports are expected to decline slightly.

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Past Trends in Production

Short- and long-run forecasts indicate increasing self-sufficiency in Denmark in grains. This is already an accomplished fact for wheat, and nearly so for rye and barley.

Barley dominates grain production, accounting for over 70 percent of total output. Production of barley was over 4.2 million tons in 1965-67, rising from about 2.4 million in 1955-57, or by nearly 80 percent. Rye production reached a peak in 1961 and has declined since, due partly to declining demand for rye. Wheat production increased sharply in the 1960's but has declined in recent years to a stabilized level which should cover domestic consumption.

A major development has been the shift out of wheat, rye, and mixed grains into barley. Area sown to barley fluctuated between 600,000 and 760,000 hectares in the late 1950's, and rose to over 1 million hectares in recent years. Wheat and rye area increased until the early 1960's but declined in the past few years.

Although increased production has been due chiefly to larger acreage, yields of all the major grains increased to levels among the highest in Western Europe. Rye yields increased by 20 percent, while oats, wheat, and barley increased by 13, 11, and 4 percent, respectively (1955-57 to 1965-67 comparisons).

Factors Affecting Production

Previously independent from Government intervention, the Danish grain producer has required increased subsidization since 1958. However, in recent years guaranteed supports to bread grain producers have been discontinued, and now bread grains are supported by minimum import prices and variable levies, as is the case with feed grains. This affords less support to bread grain producers and reinforces a shift from bread grains to feed grains (particularly barley).

The effect of mildew on yields of barley has been reduced by using resistant varieties, such as Emir and Lofa. The small plantings of winter barley have been discontinued to control the spreading of mildew diseases from the winter to the spring crop.

Utilization

Denmark's use of coarse grains for feed increased from over 3 million tons in 1955/56 to more than 5 million tons in 1966/67--a gain of over 50 percent. There has been increased use of nongrain feeds, reducing the likelihood of any significant increase in demand for feed grains in the near future. Increased consumption of oilcake and other protein supplements, including domestically produced horse beans, has reduced the demand for imported feed grains.

Consumption of barley represents about one-fourth of all feeds consumed, and about 70 percent of total feed grain consumption. The importance of barley in the livestock economy will increase; however, barley imports should phase out

by 1970. The share of wheat and rye used for feed has not changed significantly, averaging around 38 percent of available bread grain supply. Per capita consumption of wheat and rye for food is likely to continue to decline slowly following the pattern of decreasing bread consumption throughout most of Western Europe.

Trade

Grain trade is decreasing. Barley imports trended upwards from 1955 to the early 1960's, but declined in recent years. This trend will continue as self-sufficiency in barley is approached. Wheat and rye imports declined to low levels by 1966/67. In the mid-1950's, wheat imports averaged over 200,000 tons, and rye over 100,000 tons.

Corn imports increased sharply from 28,000 tons in 1955/56 to 218,000 tons in 1966/67. However, corn imports are expected to decline slightly from current levels.

Projections

Consumption of feed grains, primarily barley, is expected to show further increases by 1970/71. On the other hand, use of wheat and rye for feed will likely show a rather sharp decline as production of these grains drops. Total production of all feed grains, however, will increase faster than consumption, causing net feed grain imports by 1970/71 to fall below the 0.4 million tons imported in 1965/66-1966/67.

The increase in total grain requirements will largely be due to a moderate rise in hog numbers. However, most of the feed requirements for hogs will be met by domestically produced barley and dairy byproducts. Poultry and egg production should continue to decline and feed requirements for this sector will decrease. The number of milk cows is also expected to show some decline, due to low export prices for butter, relatively unfavorable prospects for cheese exports, and reduced domestic whole milk consumption. Although beef and veal production is likely to increase, herd numbers are not expected to show any significant change unless the Government develops a more favorable policy towards beef production.

Japan

Unlike other major grain importing countries, Japan shows a downward trend in coarse grain production. Production declined by half between 1955-57 and 1965-67. Concurrently, utilization increased because of expanded feed and industrial requirements. Imports of coarse grains during the past decade have more than quadrupled and are expected to continue rising through 1970/71. Japan will continue as an important market for U.S. feed grains. However, the Japanese Government is developing alternative sources of feed grain supplies through programs of technical assistance and capital investment. Corn production potentials in Indonesia

and Cambodia are being investigated and plans are being made and programs implemented for promoting production of corn and sorghum in Thailand, Tanzania, Australia, and Brazil.

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Past Trends in Production

Coarse grain production in Japan decreased from 2.7 million tons in 1955-57 to 1.4 million tons in 1965-67, a decline of 50 percent. Two-thirds of the grain produced in 1955-57 (excluding rice) were coarse grains, but by 1965-67 this proportion had declined to 55 percent and consisted primarily of barley. During the same period, coarse grain area declined by three-fifths, compared with a one-third decline for wheat. Yields of most grains have increased from 12 to 18 percent since 1955-57. Corn, with a 37-percent increase, is an exception.

Factors Affecting Production

Most of the grain produced in Japan is sold directly to the Government at established parity prices. This is part of the Government's program of supporting, guiding, and protecting agriculture. The attempt to expand livestock production has implications for coarse grains but the impact will be greater on grain imports than on indigenous grain production.

Application of fertilizer (pure plant nutrients) in Japan has expanded at a rapid rate. Between 1950 and 1965, the use of nitrogen increased by two-thirds, phosphate doubled, and potash increased more than fivefold. Farm mechanization, also on the increase in Japan, is helping to cut labor requirements, expedite harvesting, and intensify land utilization.

Utilization

The most dramatic change in barley utilization since 1955/56 is the sharp decline in its use as food--from 2.5 million tons in 1955/56 to one-fourth this amount in 1967/68. However, increased amounts of barley are being used for feed and manufacturing.

Corn is the major feed grain used in Japan, increasing from 1.6 million tons in 1960/61 to 3.5 million tons in 1967/68. Grain sorghum is Japan's second most important feed grain with consumption estimated at 2.5 million tons in 1967/68. Both corn and grain sorghums are important ingredients in Japan's expanding mixed feed industry. Only 2-3 percent of Japan's wheat supply now moves into feed use, compared with 15 percent in 1962/63.

Feed use of grains increased about 40 percent between 1963/64 and 1966/67. Hogs and chickens, the two major grain-consuming classes of livestock, have been increasing rapidly in Japan as higher income levels have led to more demand for pork and poultry.

Trade

Japan's grain imports have risen rapidly, going from 3.8 million tons in 1956/57 to 12.0 million in 1966/67. Coarse grains account for nearly four-fifths of the increase.

The Japanese Government is developing alternative sources of feed grain imports through programs of technical assistance and capital investment. Corn production potentials in Indonesia and Cambodia are being investigated and plans are being made for promoting corn and sorghum production in Thailand, Tanzania, Australia, and Brazil. The Japanese Government views these developments as essential to the guaranteeing of adequate supplies of feed grains at relatively low prices.

The U.S. share of Japan's major coarse grain imports varies substantially from year to year, depending on the size of the feed grain harvest in other exporting countries and on how competitive the U.S. price is compared with other suppliers. The U.S. percentages in 1967 and in 1966 (shown in parentheses) were as follows: barley, 23, (59); corn, 40 (62); millet and sorghum, 86 (89).

Projections

Total coarse grain production, based on recent trends in areas and yields, is estimated to fall below a million tons by 1970 (output was 2.7 million tons in 1955-57 and 1.4 million tons in 1965-67).

Rising consumer incomes and a continuing expansion in the demand for meat and other livestock products are expected to push Japan's coarse grain consumption to around 12 million tons by 1970/71.

The most probable level of Japan's coarse grain imports in 1970/71 is placed at 11 million tons. However, the price relationship between coarse grains and other concentrated feedstuffs will influence the level of coarse grain imports.

Argentina

Coarse grain production increased over 60 percent between 1955-57 and 1965-67. More land is being planted to corn and grain sorghum and less to barley and oats. The Government is encouraging investment in agriculture and pursuing policies designed to encourage exports. Argentina is expected to remain a strong competitor in the world market for grains and to further expand corn exports by 1970/71, despite rising domestic feed requirements in hog and poultry production.

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ast Trends in Production

Argentina's coarse grain production averaged 9.7 million tons in 1965-67, r an increase of nearly 60 percent from the 1955-57 average. Due to a relative- y large expansion in corn and grain sorghum, production of coarse grains as a hare of total grain production increased between 1955-57 and 1965-67.

Coarse grain area increased 9 percent from 1955-57 to 1965-67. In the last ecade, corn and grain sorghum acreages have expanded with land being shifted way from the production of barley, oats, and rye. Argentine corn yields dropped harply after World War II, but with the aid of hybrid seed, yields have in- reased over 37 percent between the periods 1955-57 and 1965-67, resulting in a evel exceeding that of the World War II years. Relatively high yields have ade grain sorghums strongly competitive with other crops for land use.

actors Affecting Production

The greatest encouragement to new investment in agriculture has come in- irectly from the considerable success of the Government's stabilization program. ome boost to investment was also provided when the peso was devalued by 40 per- ent in March 1967. Government discouragement of inefficient sugarcane produc- ion may result in a portion of this land being shifted to grain production.

Crop yields in Argentina are uniformly low, compared with those of competing ountries, because fertilizer application is not a regular practice due to easy arly successes with fertile soil. Fertilizers can be used effectively on many oils but research is needed to determine optimum levels.

rade

Argentina is a strong competitor in the world feed grain market. During he past decade, it has been the supplier for about one-sixth of the volume of orn exports and about 13 percent of the export trade for millet and sorghum. rgentina's exports fluctuate considerably from year to year, however.

rojections

Argentina has great unused capacity for increasing production of many ag- icultural products. The quantity of grain that can be absorbed in world trade hus will be a determining factor in how much Argentina produces in future years. oarse grain production may total 12 to 12.5 million tons in 1970, compared with he 1965-67 average of 9.5 million tons. Production increases for corn and rain sorghum should offset possible reductions in rye, barley, and oats pro- uction. For a large expansion in coarse grain production, Argentina would need ew varieties, more mechanization, and wider use of fertilizer as well as lower ost fertilizer.

With more grain being used in hog rations and to expand the poultry indus- ry, domestic demand for feed grains should continue strong through 1970/71.

By 1970, exports are likely to expand for wheat, corn, and sorghums, compared with the 1956-61 level. Producer prices in Argentina are likely to remain highly competitive with those in other corn-exporting countries.

Brazil

During the past decade, overall production of coarse grains has increased while wheat production has fallen sharply. Corn plantings, the bulk of the coarse grain area, have increased rapidly in recent years. Higher support prices for corn have also promoted use of improved seed and more fertilizers and insecticides. However, expansion of corn into less favorable areas has dampened yield increases. Exports accounted for only 1 percent of the corn produced in 1950-64--mainly flint-type corn exported to Italy--but the Government expects to improve its future export position by emphasizing output of soft hybrid varieties.

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Past Trends in Production

Output of all coarse grains changed in Brazil between 1955-57 and 1965-67 as follows, in percentages: rye, -15; barley, -6; oats, 53; and corn, 60. Production of the first three grains, however, is still relatively unimportant. Wheat production has fallen sharply from the record level in 1956 when high prices offered much incentive to producers.

Area seeded to corn, which accounts for the bulk of the coarse grain acreage, has increased rapidly in recent years, climbing from 5.9 million hectares in 1955-57 to 8.4 million hectares in 1965-67. Average corn yields have not increased nearly as much as acreage due to the extension of production into less favorable areas. Average wheat yield in 1965-67 changed little from the 1955-57 average.

Factors Affecting Production

Early in 1964, the Government established a system of higher support prices providing incentives for producers to expand output of corn. The higher support price has been effective in promoting larger corn crops.

Since 1950, greater emphasis has been placed on inputs of improved seeds, fertilizer, and insecticides. Extension of corn production into less productive areas has tended to offset increased use of hybrid varieties for yield improvements.

Due to ecological and disease problems with wheat, future expansion of grain production probably will be in rice, corn, or sorghum.

Utilization

Little information is available on grain utilization in Brazil. The rather rapid expansion in hog and broiler production has undoubtedly increased feed grain requirements, and total consumption has increased. However, there is evidence of a negative income elasticity for direct consumption of corn, indicating a probable decline in consumption of corn for food (19, p. 50).

Trade

Brazil's coarse grain trade has been comparatively insignificant; only around 1 percent of the corn output was exported in 1950-64, mainly flint-type corn to Italy. During 1965-67, however, corn exports increased substantially, averaging almost 5 percent of production.

Projections

Higher corn yields are expected with wider use of hybrid seed. Improved market facilities may lead to some improvement in corn exports. In 1968/69, for example, corn exports are expected to be about 1.1 million tons, compared with about 0.6 million tons during each of the years 1965-67. Exports in 1970/71 may also total about 1.0 million tons. This, together with rising domestic demand, could lead to a 13-million-ton crop in 1970. The Government is emphasizing output of the soft hybrid varieties.

Mexico

Since 1964/65, Mexico has become a net exporter of coarse grains rather than a net importer, as it has been traditionally. Corn is by far the leading grain produced in Mexico, but sorghum has also become important since its introduction in the early 1950's. Coarse grain production will continue to increase through 1970/71, but expansion in domestic demand for feed and industrial uses can be expected to dampen any further expansion in net coarse grain exports.

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Past Trends in Production

Production of coarse grains has expanded rapidly in Mexico in recent years--from 4.8 million tons in 1955-57 to 9.6 million in 1965-67--with corn accounting for most of the increase. Corn is by far the leading grain (72 percent of all grains produced in 1965-67). Grain sorghum has become important in Mexico only since its introduction in the early 1950's, while corn is a traditional staple that is grown in all parts of the country.

Corn area climbed over one-third from 1955-57 to 1965-67, in contrast to decreases for both barley and oats. During the same period, average corn yield improved 37 percent, oats 12 percent, and barley 23 percent.

Factors Affecting Production

Mexican agricultural policies are directed toward increasing self-sufficiency in the basic crops; they feature price and marketing assistance, and stiff barriers against agricultural imports. Increased irrigation, associated with greater use of fertilizer and hybrid seed, has brought about higher yields.

Utilization

Although per capita consumption of corn will probably decline, there is expected to be an expansion in aggregate direct consumption for cereals and in their consumption for livestock feeding and industrial use.

Trade

Mexico's imports of oats and barley are relatively small, fluctuate widely, and show no trend during the past decade. Sorghum production has increased rapidly and Mexico now exports small quantities. Mexico has achieved its goal of self-sufficiency in corn production and exports its surpluses. However, present Mexican policy is not designed to encourage grain production for export.

Projections

Production of coarse grains is expected to increase in Mexico and may reach 11 million tons by 1970. Only about one-tenth of the harvested area for corn is irrigated. There may be a small further increase in the corn planted on unirrigated areas, which may slow down yield increases.

Mexico's 5-year development plan for 1966-70 states that any surplus of wheat is to be used to stabilize prices and supplies and is not for export. Barley and oats are likely to continue to be imported by Mexico with demand growing faster than domestic production. Corn will continue to be in a surplus position in 1970 and the volume of its exports will exceed imports of other coarse grains. Some exports of sorghum are also likely.

Canada

Despite lower area, Canadian coarse grain production has increased in the 1960's. This is due largely to increasing yields. Although Canada remains a net exporter of coarse grains, increased consumption at home and greater competition abroad have resulted in a lower level of exports than a decade earlier. Some expansion of coarse grain area and production by 1970/71 is like-

ly to meet the expanded domestic demand and to maintain Canada's export market.

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Past Trends in Production

Canadian coarse grain production averaged 14.5 million tons in the 1965-67 period for a 7-percent increase over the 1955-57 average. Production changes for the individual grains between 1955-57 and 1965-67 show increases of 53 percent for rye, 4 percent for barley, 125 percent for corn, and 20 percent for mixed grains; oats production was down 13 percent.

Planted coarse grain area dropped from 9.1 million hectares per year in 1955-57 to 7.5 million in 1965-67, an 18-percent decrease. Despite lower area, Canadian coarse grain production has not decreased. This is due to the general rise in yields caused by increased levels of inputs and improved varieties. Barley yields were up 42 percent, corn yields over 41 percent, oat yields 16 percent, and rye yields about 27 percent.

Factors Affecting Production

The Canadian Wheat Board, assisted by the Board of Grain Commissioners and by the private grain trade, operates a monopoly for commercial marketing, including exports on behalf of grain producers (wheat, barley, and oats) in the Prairie Provinces. In addition to pricing activities, the Board buys, stores, and sells, or otherwise disposes of, grains under pooling arrangements for various grades of each crop. It has the power to establish delivery quotas, based upon permit books issued to each producer or producer group, to promote orderly production and marketing.

Improved cultural practices, new varieties of grains, and increased use of fertilizer and machinery have contributed to the higher production in recent years. Total fertilizer sales for consumption rose by over 79 percent in Canada between 1961/62 and 1965/66. The development and use of short-season corn varieties and expanding area, largely in Ontario Province, have resulted in rapid increases in corn grain production. This expansion in corn production is expected to continue for the near future.

Utilization and Trade

Coarse grain consumption in Canada during the late 1950's remained about constant with a declining trend on a per capita basis. In the mid-1960's, consumption increased; in per capita terms, the declining trend was halted and even moved upward slightly. Increased production of livestock and poultry accounted for the larger consumption. However, future increases in livestock and poultry production are expected to be smaller than in recent years.

Coarse grains have been increasing in relative importance to wheat for livestock feed. Barley and oats are the major coarse grains fed, but corn is increasing in importance. Canadian exports of barley and oats have generally trended downward, while corn imports have leveled off around 500,000 tons.

Projections

Total Canadian coarse grain production is estimated to be about 16 million tons in 1970. Rates of feeding are expected to be maintained at high levels in response to rising consumer demand for meat. Exports of barley and oats will continue. Canada will need to import some corn despite its successful efforts to increase production of this crop.

Australia

Australia is currently dependent on agricultural exports for about 70 percent of its foreign exchange earnings. Government policies are oriented toward expanding agricultural exports. Coarse grain production increased 48 percent between 1955-57 and 1965-67, compared with a 135-percent increase for wheat. Of particular interest in Australia is the development of new land areas with foreign capital. Production of sorghum for shipment to Japan is a major objective in this venture. Some newly developed areas in Australia are already being planted to sorghums, and small shipments have been made to Japan. The potential for development of sorghum crops in the southern part of Western Australia alone has been estimated at 810,000 hectares.

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Past Trends in Production

Coarse grain production increased from 1.9 million tons in 1955-57 to 2.7 million tons in 1965-67--an increase of 40 percent. The comparable increase for wheat was 135 percent. As a consequence, the proportion of coarse grains to total grains dropped from one-third in 1955-57 to one-fourth in 1965-67.

Australia's coarse grain area increased by one-fourth between 1955-57 and 1965-67, while the wheat area more than doubled. Yields of most grains have increased substantially due to increased use of fertilizer and improved varieties.

Factors Affecting Production

Australia is currently dependent on agricultural exports for about 70 percent of foreign exchange earnings (2). The Government has emphasized the expansion of agriculture to assure food and raw materials for export markets as well as for meeting domestic needs. No production controls currently are placed on wheat and coarse grains (rice acreage is controlled), so that growers have a free choice in deciding which grains to produce (4).

Most of the barley produced in Australia is sold through three grower-controlled marketing organizations. The barley is sold in the domestic and export markets at the best price, and total net proceeds are distributed to farmers in proportion to the quantities and in accordance with the varieties and grades of the barley they delivered (4).

Other policies are being pursued by the Federal Government which have a direct or indirect impact on grain production. Of particular interest is the development of new areas with the assistance of private capital from Japan and the United States. In Queensland, one scheme for land development is scheduled to add about 45 million hectares to pasture and crop production by 1977. Approximately 32,000 irrigated hectares of grain sorghum are planned for New South Wales and newly developed areas of the Ord River district in Western Australia. In the Tipperary section of Northern Australia, the area planted to sorghum in 1968/69 (9,700 hectares) was double that of the previous year; U.S. investors in the development expect to plant over 77,000 hectares in 1972. The potential for development of sorghum crops in the southern part of Western Australia has been estimated at 810,000 hectares. About 4,000 hectares are expected to be planted in sorghum in the Esperance area of Western Australia in 1968/69.

Gruen et al. have characterized Australian agriculture as "...a technically dynamic agriculture which is steadily using more capital, particularly in the form of farm machinery and equipment and an increasing volume of non-farm produced inputs such as fuel, fertilizer and other agricultural chemicals." (8, p. 159).

A subsidy of $88 per long ton to manufacturers of nitrogen fertilizer went into effect in 1966. As a result, Australia's consumption of nitrogen fertilizer increased to an estimated 142,000 tons in 1967/68 or double the amount used in 1965/66. The subsidy has led to a sharp rise in the use of nitrogen in many wheat areas. Farmers using superphosphate have received a transport subsidy of $6.61 per long ton since 1963 (3). This subsidy was increased to $8.96 per long ton as of August 1968.

Agricultural research funding has increased in recent years and has resulted in improved varieties of barley. A U.S.-Australian enterprise in New South Wales is experimenting with high-yielding varieties of grain sorghum and other feed and forage crops (1, p. 22).

Utilization

The use of grains for feed has shown a general increase. Wheat and oats are the two most important grains fed to livestock (or poultry), with each grain accounting for about one-third of total grains fed. The relative importance of corn and sorghum declined in the mid-1960's, but indications are that both of these grains will be emphasized in the early 1970's as export commodities to Japan. Barley accounts for one-eighth to one-fifth of the grains used as feed each year. Food use of coarse grains appears to have stabilized in excess of 180,000 tons annually, with per capita declines being offset by population increases. Other uses--seed and industrial--are continuing to grow due to the expansion of grain area and increased demand for barley for malting.

Trade

Australia's exports of coarse grains show substantial year-to-year variations depending on the level of supplies (production plus beginning stocks) and on export markets. During 1959/60-1966/67, shipments ranged from a high of 1.1 million tons in 1960/61 to less than half that amount in 1965/66. Australia's most important and most stable export market during this period was Western Europe, which accounted for 50 to 88 percent of annual shipments. However, the importance of Japan as an export market for coarse grains is increasing, particularly for sorghum. Communist Asia, an important outlet during most of the early 1960's, is no longer a market for Australian coarse grain exports.

Australia's major coarse grain exports are barley and oats, but the level of export of barley has generally declined in recent years. Corn exports are minor. Sorghum exports show substantial year-to-year variation; in 1967/68, exports were at a record high.

During 1959/60-1966/67, exports of coarse grains averaged 30 percent of total domestic production. In the early part of this period, over two-fifths of the coarse grains were exported, compared with one-fifth in the latter years.

Projections

Gruen et al. have developed "most likely" estimates for 1970 production, consumption, and exports of wheat, barley, and oats--the three major grains currently produced in Australia (8, p. 405).

These projections show output of wheat, barley, and oats increasing through 1970 (and even through 1975 and 1980). However, nearly all of the increased output occurring between the base period (average for the years 1958/59-1961/62) and 1970 (average of 1969/70 and 1970/71) will be in wheat. Both larger acreage and higher yields will contribute to expansion of grain output.

Use of wheat, barley, and oats for all categories of consumption--seed, food, and feed--is expected to increase from the base period to 1970 (although use of wheat for feed is expected to decline between 1965 and 1970). Increased domestic consumption of pork and poultry will expand feed grain use. Major exports of either pork or poultry in 1970 are considered unlikely.

Exports of barley and oats in 1970 are expected to be below those of the base period, since consumption of both grains is forecast to increase at a faster pace than production. Also, the base period used in the study coincided with peak exports of barley to Japan. These exports dropped sharply in later years as incomes and standards of living increased and Japanese food consumption patterns shifted from barley to rice and wheat. Exports of wheat will likely show a substantial rise above the base period level.

Projections by Gruen et al. do not provide an adequate assessment of near-term or future developments for sorghum. While sorghum exports will continue to expand through 1970, major production and export increases are likely to occur later.

Thailand

Corn is the major coarse grain export of Thailand and Government policies are directed toward expanding production to further increase foreign exchange earnings. The Thai Government is encouraging increased grain fertilization, use of new grain varieties, and improved cultural practices. Coarse grain production in Thailand is expected to continue increasing to 1970/71. Although the National Plan calls for a strong commercial livestock industry, most of the corn and sorghum production will continue to be exported through 1970/71 or longer.

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rends in Production

Thai production of feed grains centers on corn, although some sorghum is roduced and exported. Corn production rose from an annual average in 1953-55 60,000 tons to 1,200,000 tons in 1967. This increase is due to (1) expansion planted area from 52,000 hectares in 1953-55 to 608,000 hectares in 1967. and 2) increase in yields from 1,154 kilograms per hectare in 1953-55 to 1,974 kilorams per hectare in 1967.

actors Affecting Production

The Thai Government's corn policy is aimed at further increases in production through encouraging fertilization, use of new grain varieties, and improved cultural practices. Agricultural extension services, credit, and corn rice supports are provided. A further policy goal is diversification of export arkets and increased domestic use of corn to stabilize the market.

American and Japanese export firms have been making heavy investments in hai corn, ranging from drying and storage facilities in Bangkok to market inormation and even extension services in the upland areas.

rade

Government success at diversifying markets is mixed. The share of exports oing to Japan has decreased from 80 percent in 1958 to 60 percent in 1967, with ong Kong, Singapore, Taiwan, and Malaysia taking most of the rest. On the other nd, domestic demand has remained low and exports rose from 77 percent of production in 1953-55 to 98 percent of production in 1966.

rojections

Thailand's Second National Economics and Development Plan (1967-1971) puts rward a production target of 1.5 million tons for corn and 300,000 tons for rghum. The Plan also is committed to the promotion of a strong commercial

livestock industry. The latter will take some time to develop, and most of the corn and sorghum production will continue to be available for export during the next decade.

Republic of South Africa

South Africa's major coarse grain export is corn, and Government policies are directed toward a further expansion of exports in 1970/71. The Government is extensively involved in marketing and distribution. Substantial increases in agricultural output in the Republic of South Africa during the postwar period can be partly attributed to the degree of price stability inaugurated by the marketing boards.

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Past Trends in Production

Corn is the primary grain grown in the Republic of South Africa, accounting for over 90 percent of coarse grain output. Production of corn varies significantly from year to year, due to the extreme weather variability, but there is a substantial upward trend in both area and yield. The dramatic increase in corn production in 1966/67--with output in excess of 9 million tons--was due largely to extremely favorable weather. Production in both 1965/66 and in 1967/68 was around 5 million tons. Sorghum production had increased to over 800,000 tons in 1966/67, but also dropped abruptly in 1967/68 to only one-fourth this amount. As with corn, however, there is an uptrend in the area and yield of sorghum.

Factors Affecting Production

The Government of South Africa is extensively involved in the marketing and distribution of agricultural products. The substantial increase in agricultural output achieved during the postwar period can be attributed, at least in part, to the degree of price stability inaugurated by the marketing boards. Exported corn is sometimes sold at a loss by the Government. This is motivated by (1) a desire to maintain a relatively high level of corn production to assure self-sufficiency, (2) the political influence of corn producers, and (3) a desire to use corn sales as a source of foreign earnings.

Trade

Exports of feed grains include some sorghum and negligible amounts of oats. The main export, however, is corn. During 1951/52-1955/56, annual corn exports of the Republic of South Africa averaged 365,000 tons. Peak exports of 2.4 million tons occurred in 1963/64, followed by an annual average of only 390,000 tons in 1964/65-1966/67 (table 7).

Projections

A study done under contract to the Economic Research Service, USDA, estimates that corn exports of the Republic of South Africa will approximate 3 million tons in 1970 and 3.5 million tons by 1975 (12). Production is projected at 7.8 million tons in 1970 and at 9.4 million in 1975. Domestic demand is put at 4.8 and 5.9 million tons in 1970 and 1975, respectively. The study assumes the continuation of existing Government policies and the expansion of the marketing and handling capacity for grains.

Eastern Europe 9/

Coarse grain area for the whole of Eastern Europe has declined since 1950, but increased use of fertilizer and more mechanization has pushed output to higher levels in Poland, Bulgaria, Romania, and Yugoslavia. Increased production of meat and milk has sharply expanded feed grain requirements throughout Eastern Europe. However, net imports of coarse grains by Eastern Europe in 1970/71 are projected to be short of 1.5 million tons, about equal to net imports in 1961-65 (but substantially above the 0.2 million tons of net exports calculated for 1965/66-1967/68).

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Past Trends in Production

Coarse grain production in Eastern Europe averaged 33.2 million tons during 1951-55, 39.1 million tons during 1956-60, and 40.6 million tons during 1961-65. 10/ Production peaked at 47.2 million tons in 1966, declining to 43.5 million tons in 1968. The decline in production was primarily a function of weather.

Total grain production (excluding rice) during the same periods averaged 47.4, 54.7, and 59 million tons, respectively, peaking at 74.8 million tons in 1967. The share of coarse grains in total production fell over the period from almost 70 percent to just above 63 percent.

Factors Affecting Production

Major underlying factors affecting coarse grain production, as well as the output of other crops and livestock products in Eastern Europe since 1950, were collectivization and the various policies associated with the implementation of collectivization in the different countries of the region.

9/ Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, and Yugoslavia.

10/ All grains except wheat and rice.

The factors which can be directly related to coarse grain production are changes in area and other inputs. Between 1950 and 1968, the area sown to coarse grains in Eastern Europe declined from about 23 million hectares to slightly more than 20 million hectares. Area sown declined in the early 1950's, rose to 24 million hectares in 1957, and then declined after that. On the other hand, use of fertilizer in agriculture in Eastern Europe quintupled between 1950 and 1967--from 1.2 to 6 million tons of plant nutrients. In the period from 1959 to 1962, there was a slowdown in the rate of growth of fertilizer use, coinciding with the last major drive for collectivization. However, fertilizer use commenced to increase rapidly again in 1963. Between 1962 and 1965, application of plant nutrients per hectare of sown area more than doubled in Bulgaria, Czechoslovakia, Romania, and Yugoslavia. Increases in East Germany, Poland, and Hungary were less significant, ranging between 20 and 45 percent.

The increase in tractors and other machinery in agriculture in Eastern Europe has been relatively rapid since 1950. The rate of increase and the ratio of tractors to sown area differ considerably among the various countries. With the exception of Poland, the rate of increase in tractor deliveries to agriculture was greater during 1956-60 than during 1961-65. But in all countries except East Germany and Yugoslavia, the rate of increase in the latter period was still over 50 percent. Sizable increases also took place in 1966 and 1967.

Trends by Country

In East Germany, coarse grain production in 1961-65 was below the 1951-55 level. Yields, already high in the early fifties, changed little over the 15-year period, and did not offset the decline in area of roughly 400,000 hectares. In Czechoslovakia, yields were below those of East Germany in the early fifties, but well above those of other countries in the region. Coarse grain yields increased 3 quintals per hectare between 1951-55 and 1961-65, with two-thirds of the increase taking place in the decade of the fifties. Until 1962, the coarse grain area stayed relatively constant at around 18 million hectares, but dropped about 200,000 hectares thereafter. This decline in area accounts for the reduced output in Czechoslovakia since 1962 despite increased yields.

In Poland, yields of coarse grains--primarily rye, barley, and oats--rose steadily over the 1951-55 to 1961-65 period, about 2 quintals each 5-year period. The average yield during 1967 and 1968 was about 2 quintals per hectare above the 1961-65 average. The coarse grain area remained close to 8 million hectares until 1961, when it began to decline to the present 6.7-6.8 million hectares. Since 1965, output has stabilized at about 12.5 million tons, about 2.5 million tons above the level prevailing in 1951-55.

During the past decade, coarse grain production in Hungary has been fairly stable at around 5 million tons. This reflects a decline in area of about 400,000 hectares since 1957, with a compensating increase in yields.

The major increases in coarse grain output in Eastern Europe, except for Poland, have taken place in the three southern countries of Bulgaria, Romania, and Yugoslavia. In these countries, production exhibits wide annual fluctuations because of recurrent summer droughts which affect corn yields, the major feed

rain. Coarse grain production rose sharply in Bulgaria and Yugoslavia--from .1 and 12.2 quintals per hectare, respectively, in 1951-55 to 21.2 and 20.1 uintals in 1961-65. Yields were especially high in 1966, exceeding 30 quintals Bulgaria and 27 quintals in Yugoslavia. Romania's yield increases were much ss significant, going from 12 to over 17 quintals between 1951-55 and 1961-65. he peak yield in Romania was 23.3 quintals in 1966.

The coarse grain area in Yugoslavia rose from 3.2 to 3.7 million hectares between 1950 and 1957, before falling to the present 3.3 million hectares. oarse grain area declined 300,000 hectares in Bulgaria and between 400,000 and 00,000 hectares in Romania during the same period. These area declines were ore than offset by higher yields so that coarse grain production between 1951-55 nd 1961-65 in these three countries increased by 500,000 tons in Bulgaria (29 ercent), 1.5 million tons in Romania (28 percent), and 2.5 million tons in Yugo-lavia (58 percent). The peak output level of 1966, however, was 5.8 million ons above the 1961-65 average.

tilization

Between 1954 and 1966, the total grain-consuming animal units in Eastern urope increased about 11 percent. Coarse grain availabilities per animal unit--he supply of all grains except wheat after deducting other uses except feed--ncreased during the period, although significant annual fluctuations took place. otal grain availabilities (including wheat) per animal unit moved upward more onsistently, indicating a greater use of wheat for feed in the northern countries of the region.

Cattle numbers decreased between 1950 and 1965 in Bulgaria and Hungary, remained unchanged in Czechoslovakia and Romania, and increased in East Germany, oland, and Yugoslavia. Milk production increased 33 percent in the region and howed an especially pronounced upturn in Bulgaria and East Germany. Beef and eal output also rose sharply in all countries except Romania and Czechoslovakia here slower increases took place.

Between 1950 and 1965, hog numbers increased from 30 to 51 million, sheep umbers from 33 to 43 million, and poultry numbers from 66 to 273 million. During that period, egg output increased 100 percent, red meat production almost oubled, and poultry meat more than doubled.

There has probably been an improvement in feeding efficiency in Eastern urope and much of the increased feed supply has gone into increased output ather than numbers, although the increases in hog and poultry numbers have been ubstantial. Both output and numbers have generally been determined by annual omestic feed availabilities.

rade

Total grain imports by Eastern Europe increased from 4.6 million tons in 951-55 to 7.1 million tons in 1956-60 and to 8.6 million tons in 1961-65. Coarse grains accounted for 1.7, 2.1, and 2.9 million tons. Coarse grain imports

of around 2 million tons were characteristic of the years from 1953 through 1960. But from 1961 through 1964, coarse grain imports exceeded 3 million tons, peaking at 3.6 million tons in 1965. They dropped back sharply to the 2- to 2.5-million-ton range in 1965-67. Most grain imports, both food and feed grains, were taken by the northern countries.

Exports of 1 to 2 million tons of coarse grains, most of which came from the southern countries, reduced the level of net coarse grain imports substantially. Net coarse grain imports averaged 1 million tons during 1951-55, about 700,000 tons during 1956-60, and 1.3 million tons during 1961-65, peaking at 2.3 million tons in 1965. In 1966 and 1967, coarse grain exports exceeded imports; in 1968, net coarse grain imports were estimated at around 600,000 tons.

The peak level of total grain and coarse grain imports during 1961-65 appears to have been a function of declines in area, a slowdown in yield increases, and a reduction of wheat exports by the USSR to the region. The northern countries of Eastern Europe substitute coarse grains for wheat in their imports because both are used as feed. There was also a large decline in their potato production, a major feed crop, in the northern grain importing countries of the region during the early sixties. The improvement in grain production in Eastern Europe after 1964 and the return of the USSR as a supplier of wheat to the region brought about a return to the total grain and coarse grain import pattern of the 1956-60 period.

Projections

Total production of coarse grains in Eastern Europe is projected at just over 47 million tons in 1970/71. This assumes a continuation of the present rate of decline in area and a yield slightly above that of 1966. This yield is projected under normal weather conditions because of an assumed continued upward movement in inputs and an improved economic situation.

Total coarse grain imports are projected at 2.5 million tons and exports at 1.1 to 1.2 million tons for 1970/71. Gross imports would be 500,000 tons lower than the 1961-65 average, but exports are projected to decline about 400,000 tons from the export level of that period. Thus, net imports are forecast for 1970/71 at 1.3 to 1.4 million tons, about as much as net imports during 1961-65. However, the net trade of Eastern Europe can change substantially from year to year depending on the influence of weather on corn production in the Danubian countries.

Yugoslavia is expected to return to the level of coarse grain exports during the last half of the fifties--about 300,000 to 400,000 tons; Romania is expected to continue large coarse grain exports, but to reduce these by roughly 200,000 tons; and Bulgaria is expected to have zero net coarse grain trade.

The major importers of coarse grains in 1970/71 are expected to be Poland, Czechoslovakia, and East Germany, in that order. The net imports of coarse grains by these three countries are expected to be slightly above the 1961-65 average, but about 500,000 tons less than the peak 1964/65 level. Hungary is expected to continue its relatively consistent level of coarse grain imports.

USSR

Production of "usable" coarse grains in the USSR increased from 44 to 49 million tons between 1953-55 and 1961-65. Variation in agricultural policies, with regard to prices and capital investment in agriculture, alternatively encouraged and discouraged coarse grain production. Larger livestock numbers have expanded feed grain requirements. Consequently, despite increasing production of coarse grains, exports in 1970/71 are projected at 700,000 tons, about equal to the level of exports since 1966.

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Past Trends in Production

Precision in the analysis of past trends in yields and production of coarse grains in the USSR is impaired by that country's practice of reporting such data in "bunker weight." To approximate "barn yield" and usable production, it is necessary to eliminate from the reported data excess moisture and foreign matter. Such adjustments affect both the level of production and the rate of change over time.

In terms of "bunker weight," total grain production (excluding rice) increased from 89.5 to 122.8 million tons between 1953-55 and 1961-65, and coarse grain production increased from 45.6 to 58.2 million tons. The increase in feed grains was from 26 to 39 million tons. During 1966-68, production of all grains and of coarse grains averaged well above these levels--about 155 million tons for all grains and about 63 million tons for coarse grains. Feed grains averaged 45 million tons.

USDA estimates of usable grain indicate an increase in total grain production of from 83 to about 100 million tons between 1953-55 and 1961-65, with coarse grains increasing from 44 to 49 million tons. Feed grains increased from 28 to 34 million tons. Using these estimates, averages for 1966-68 are about 131 million tons of total grain, including 54 million tons of coarse grain, and 38 million tons of feed grains.

Factors Affecting Production

Two factors have been critical in determining the direction and level of coarse grain production in the USSR: (1) Major changes in sown area have altered greatly the composition of coarse grain production; and (2) agricultural policy--including changes in prices, farm incentives, capital investment, and the availabilities of machinery and fertilizer--has developed in a discontinuous pattern so that there are distinct periods in which agricultural policy has had a positive or negative impact upon the output of all crops and livestock products.

The rye area decreased steadily from 23.7 to 16 million hectares between 1950 and 1965, and then dropped sharply to the present level of about 12 mil-

lion hectares. The relative position of barley and oats area was reversed about 1960. Until then, barley had fluctuated between 8 and 12 million hectares, but shot up to 21.7 million hectares in 1964. It has subsequently declined to about 19 to 20 million hectares. Area in oats ranged between 13 and 16 million hectares until 1960, and then dropped to 5.7 million hectares in 1963. It has gradually increased to the present area of approximately 8 million hectares. The corn area was 4.8 million hectares in 1950, reached 6.6 million in 1956, fell to 3.3 in 1957, and then rose again to 7 million hectares in 1961. It has fallen again to its present level of about 3.2 million hectares.

Agricultural policies during 1953-57 greatly improved the level of farm prices and incentives, the availability of machinery and fertilizer, and the level of agricultural investment. During the period, yields of all coarse grains increased, with those of barley and corn exceeding those of rye and oats. Between 1958 and 1963, a change in agricultural policy produced little improvement in yields. Another change in agricultural policy in late 1964 stimulated an increase in yields which is continuing.

Between 1950 and 1965, corn was the only coarse grain to increase yields significantly, barley yields improved less rapidly, and only modest improvements occurred in the yields of rye and oats. These yields are reported in terms of "bunker weight" or estimates of "barn yield."

Utilization

Between 1950 and 1965, cattle numbers in the USSR increased 50 percent, and cow numbers increased 58 percent. They increased another 11 and 7 percent, respectively, between 1965 and 1967, but both declined slightly in 1968. Hog numbers grew from 22.4 to 70 million between 1950 and 1963, but dropped sharply to 41 million during 1963. They recovered to almost 60 million by 1966, but declined in 1966, 1967, and 1968 to the present 49 million. Sheep numbers grew from 78 to 138 million between 1950 and the present, while goat and horse numbers declined. Both milk and meat production doubled between 1950 and 1965, egg output tripled, and wool production increased 123 percent. Between 1965 and 1968, output of each of these commodities increased another 15 percent.

These increases in numbers and output took place despite the relatively slow growth in feed grain production from 1950 to 1968. The only major non-grain feed source to increase significantly during the period was silage and other succulent feeds. Roughages and potatoes remained about the same, and major improvements in pastures do not appear to have taken place. There is evidence to indicate that wheat and rye became increasingly more important as livestock feeds after 1958, and that feeding of wheat increased further after the exceptionally large crop of 1966.

The absence of exact data on the "barn yield" of grain in the USSR does not permit a satisfactory analysis of grain utilization or the relationship of grains fed to livestock output. Soviet "bunker weight" grain figures indicate a larger absolute level of grain available for feed and a somewhat faster rate of increase in the grain supply than is the case with USDA estimates. Further research will be necessary before the problem can be resolved. However, using either "bunker weight" or estimated figures, even if large quantities of wheat

and rye are assigned to livestock feed, the share of grain in the feed supply is still low. This undoubtedly explains the continued Soviet emphasis upon increasing grain production despite sharp improvements since 1966.

Trade

Coarse grain exports by the USSR averaged 1.8 million tons during 1951-55, dropped about 200,000 tons below that level during 1956-60, and rose about 200,000 tons above it in 1961-65. Coarse grain exports dropped to less than 1 million tons after the 1966 wheat crop made possible the resumption of larger wheat exports. 11/ The USSR has never been a significant importer of feed or coarse grains.

Projections

Soviet output of coarse grains in 1970 is projected at more than 57 million tons of usable grain, including more than 42 million tons of feed grains. Barley will remain the major feed grain. The estimated level of feed grain production represents an increase of 10 million tons over the 1961-65 average, but only 4 million tons above the 1966-68 level. Total coarse grain production, however, would be up only 8 million tons over the 1961-65 average, and 3 million tons above the 1966-68 average because of the declining trend in rye production.

Despite a projected decline in total coarse grain area, feed grain production should remain relatively stable. The production increase will be due essentially to yield increases. Greater fertilizer inputs probably will be allocated to feed grains. Total fertilizer use per hectare of arable land amounted to about 35 kilograms of nutrients in 1967, compared with 12.2 kilograms in 1960. Other aspects of improved management also should help boost feed grain yields.

Net exports by the USSR of more than 700,000 tons of coarse grains are projected for 1970/71. About one-half of this amount is expected to be feed grains and the remainder will be rye and miscellaneous grains. The projected exports represent a considerable reduction from typical Soviet coarse grain exports through 1965, but a continuation of the pattern since 1966.

11/ The USSR supplies East Germany, Czechoslovakia, and, to a certain extent, Poland with a given annual supply of grain. When wheat is in short supply, feed grains and rye are shipped or vice versa, because these countries feed large quantities of wheat and also produce wheat. If the USSR ships feed grains, these countries consume more of their own wheat as food. If the USSR ships wheat, they use more wheat as feed. Since 1966, the USSR has had large wheat availabilities, but less feed grains.

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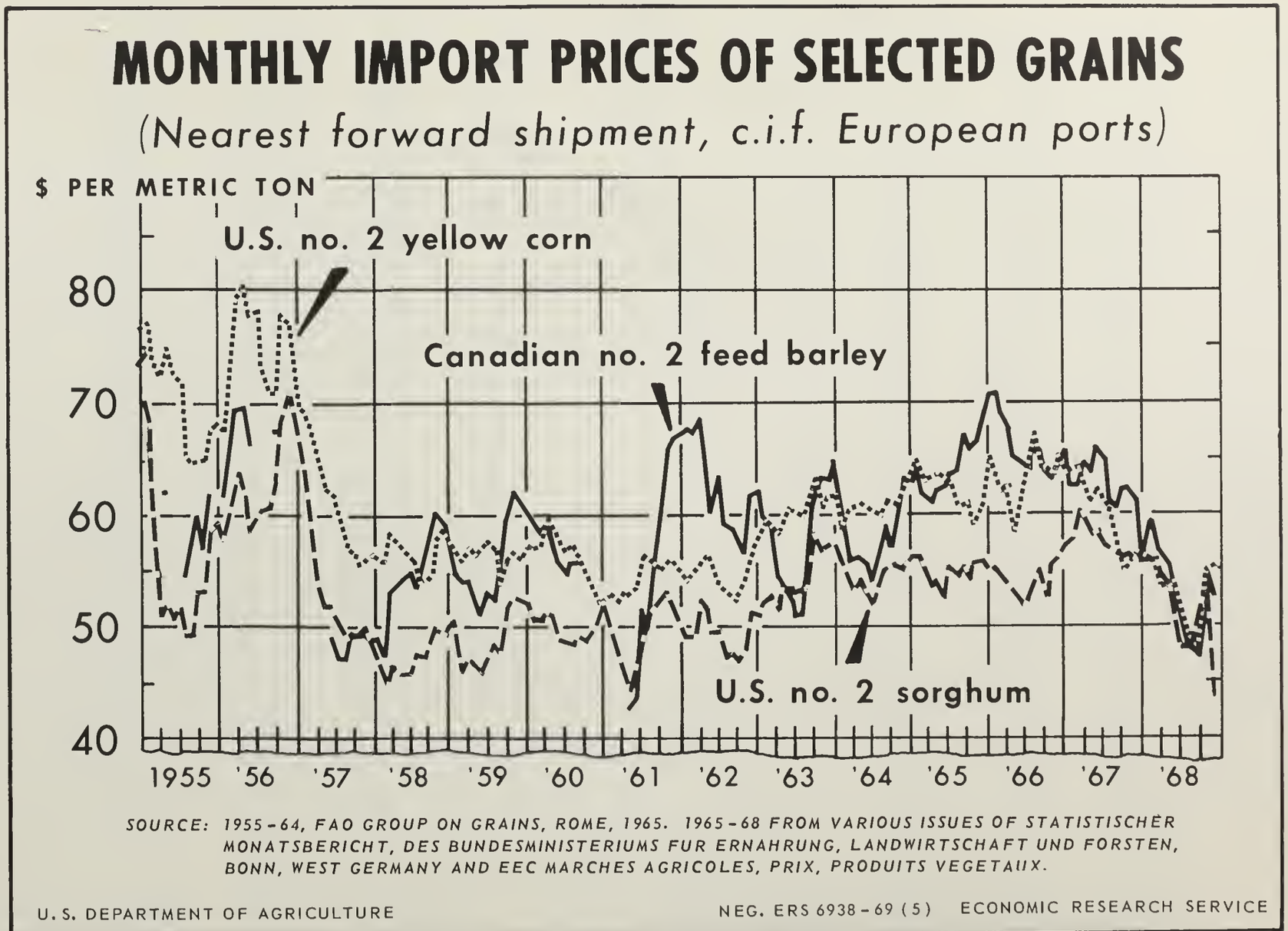
MONTHLY IMPORT PRICES OF SELECTED GRAINS
(Nearest forward shipment, c.i.f. European ports)
$ PER METRIC TON
U.S. no. 2 yellow corn
Canadian no. 2 feed barley
U.S. no. 2 sorghum
80
70
60
50
40
1955
'56
'57
'58
'59
'60
'61
'62
'63
'64
'65
'66
'67
'68
SOURCE: 1955-64, FAO GROUP ON GRAINS, ROME, 1965. 1965-68 FROM VARIOUS ISSUES OF STATISTISCHER MONATSBERICHT, DES BUNDESMINISTERIUMS FUR ERNAHRUNG, LANDWIRTSCHAFT UND FORSTEN, BONN, WEST GERMANY AND EEC MARCHES AGRICOLES, PRIX, PRODUITS VEGETAUX.
U.S. DEPARTMENT OF AGRICULTURE
NEG. ERS 6938-69 (5) ECONOMIC RESEARCH SERVICE

Figure 1

Table 1.--Beginning stocks of coarse grains in major exporting countries, 1954/55-1968/69 1/

Year	Total	Corn	Barley	Oats	Sorghum	Rye	Stocks held by the United States	
	Million tons						Million tons	Percent
1954/55	35.8	24.2	4.8	5.2	0.6	1.0	29.2	82
1955/56	41.5	27.6	5.3	5.8	1.9	.9	35.8	86
1956/57	46.0	31.0	5.2	6.9	2.1	.8	39.6	86
1957/58	53.8	37.4	6.8	7.0	2.0	.6	44.5	83
1958/59	61.0	38.7	6.7	7.1	7.9	.6	53.9	88
1959/60	68.2	39.7	7.8	7.3	12.9	.5	61.5	90
1960/61	74.5	46.2	7.3	5.7	14.8	.5	68.0	91
1961/62	84.3	51.9	7.2	6.8	17.8	.6	77.2	92
1962/63	70.1	43.3	4.5	5.2	16.8	.3	65.3	93
1963/64	64.7	35.6	5.9	6.3	16.6	.3	58.2	90
1964/65	70.8	40.0	6.7	7.5	16.3	.3	62.9	89
1965/66	56.9	30.8	5.1	6.1	14.4	.5	50.7	89
1966/67	44.6	2/21.8	5.5	6.6	9.9	.8	38.6	88
1967/68	41.8	2/22.3	6.9	5.6	6.2	.8	34.2	83
1968/69 3/	54.3	2/34.9	2/7.2	4.3	7.2	.7	45.1	83

1/ Stock figures are for the beginning of the country's crop year. The countries included for the various grains are: Corn--United States, Canada, Argentina, and Republic of South Africa; Barley--United States, Canada, Argentina, Australia, and France; Oats--United States, Canada, and Argentina; Sorghum--United States; Rye--United States and Canada.

2/ Corn stocks exclude Canada and barley stocks exclude France.

3/ Preliminary.

Sources: (9) and (10).

Table 2.--World grain production, by type of grain, 1955-68

Year	Total grains 1/	Wheat	Rice (paddy)	Coarse grains						
				Total	Rye	Barley	Oats	Corn	Millet and sorghum	Other 2/
	1,000 tons									
1955	812,296	200,376	209,352	402,054	36,838	61,136	62,373	142,683	33,658	65,366
1956	841,737	211,596	219,657	408,909	34,058	68,094	61,237	146,844	33,102	65,574
1957	835,246	210,411	215,363	407,992	35,368	63,438	56,194	147,380	44,394	61,218
Average 1955-57	830,093	207,461	214,791	406,318	35,421	64,223	59,935	145,636	37,051	64,053
1958	896,912	236,220	232,536	426,669	36,647	65,395	60,259	158,183	46,376	59,809
1959	876,125	223,216	228,622	422,615	36,887	65,464	51,961	173,830	45,449	49,024
1960	896,340	222,016	234,209	438,505	34,057	71,469	55,858	181,017	47,835	48,269
1961	881,735	211,519	238,747	429,676	33,990	69,368	48,722	177,915	44,577	55,104
1962	928,396	237,814	237,734	451,024	31,691	78,743	48,301	179,793	47,659	64,837
1963	939,346	226,211	247,739	463,537	30,150	81,965	45,254	193,314	49,382	63,472
1964	972,974	257,303	258,809	454,947	31,827	87,627	40,604	183,154	49,158	62,577
1965	968,395	247,120	248,868	470,507	33,753	86,811	42,885	195,545	48,325	63,188
1966	1,025,514	284,880	243,570	495,264	29,714	94,291	44,771	207,012	54,494	64,982
1967	1,080,321	276,606	269,075	532,560	30,429	96,265	46,360	233,196	59,296	67,014
1968	1,098,927	305,292	269,285	522,250	30,465	101,281	49,412	218,042	56,583	66,467
Average 1965-67	1,024,744	269,535	253,838	499,444	31,299	92,456	44,672	211,918	54,038	65,061

1/ Includes wheat, rice, coarse grains, and teff, a food grain grown in Ethiopia, and pulses for Mainland China.

2/ Includes mixed grains, meslin, spelt, buckwheat, canary seed, and small amounts of millet and sorghum. Also includes all coarse grains, including pulses, for Mainland China.

Source: Compiled by ERS from publications of the U.S. Government and international or regional organizations; reports of U.S. Agricultural Attachés and the Foreign Agricultural Service.

Table 3.--World production of rye, barley, oats, corn, and millet and sorghum, by major countries or areas, 1955-57 and 1965-67 1/

Crop and area	Production		Percentage of production		Annual rate of change between 1955-57 and 1965-67
	1955-57	1965-67	1955-57	1965-67	
	1,000 tons		Percent	Percent	Percent
Rye:					
Soviet Union	15,013	12,833	42.4	41.0	-1.6
Eastern Europe	11,362	11,129	32.1	35.6	- .2
EEC	4,937	3,662	13.9	11.7	-2.9
Other Western Europe 2/	1,751	1,430	5.0	4.6	-2.0
West Asia	639	768	1.8	2.4	1.9
United States	668	721	1.9	2.3	.8
Canada	260	398	.7	1.3	4.3
Argentina	721	289	2.0	.9	-8.8
Other	70	69	.2	.2	- .1
World total	35,421	31,299	100.0	100.0	-1.2
Barley:					
Soviet Union	9,973	21,233	15.5	23.0	7.8
EEC	7,403	13,430	11.5	14.5	6.2
Other Western Europe 3/	3,878	10,997	6.1	11.9	11.0
United Kingdom	2,944	8,710	4.6	9.4	11.5
United States	8,873	8,407	13.8	9.1	- .5
Eastern Europe	5,510	7,881	8.6	8.5	3.7
West Asia	5,724	5,813	8.9	6.3	.2
Canada	5,009	5,226	7.8	5.7	.4
Denmark	2,387	4,222	3.7	4.6	5.9
South Asia	3,329	2,903	5.2	3.1	-1.1
Other	9,193	3,634	14.3	3.9	-8.9
World total	64,223	92,456	100.0	100.0	3.7

Continued--

Table 3.--World production of rye, barley, oats, corn, and millet and sorghum, by major countries or areas, 1955-57 and 1965-67--Continued

Crop and area	Production		Percentage of production		Annual rate of change between 1955-57 and 1965-67
	1955-57	1965-67	1955-57	1965-67	
	1,000 tons		Percent	Percent	Percent
Oats:					
United States	19,050	12,180	31.8	27.3	-4.4
Soviet Union	12,042	7,233	20.1	16.2	-5.0
EEC	7,565	6,231	12.6	14.0	-1.9
Canada	6,379	5,546	10.6	12.4	-1.4
Eastern Europe	5,600	4,972	9.3	11.1	-1.2
Other Western Europe 2/	4,195	4,527	7.0	10.1	+ .6
Oceania	784	1,298	1.3	2.9	+5.1
United Kingdom	2,486	1,246	4.2	2.8	-6.6
Argentina	953	537	1.6	1.2	-5.6
Other	880	902	1.5	2.0	.2
World total	59,935	44,672	100.0	100.0	-2.9
Corn:					
United States	76,149	109,747	52.3	51.8	3.8
Eastern Europe	14,444	20,065	9.9	9.5	+3.3
Brazil	7,151	11,532	4.9	5.4	4.9
Mexico	4,457	8,233	3.1	3.9	6.4
EEC	4,808	7,649	3.3	3.6	4.7
Argentina	3,038	6,727	2.1	3.2	8.3
Republic of South Africa	3,944	6,393	2.7	3.0	4.9
South Asia	4,632	6,686	3.2	3.2	3.7
Soviet Union	8,327	7,067	5.7	3.3	-1.7
East Africa	3,618	5,900	2.5	2.8	5.0
East Asia and Pacific Islands	2,839	4,290	1.9	2.0	4.2
Canada	752	1,693	.5	.8	8.4
Other	11,477	15,936	7.9	7.5	3.3
World total	145,636	211,918	100.0	100.0	3.8

Continued--

Table 3.--World production of rye, barley, oats, corn, and millet and sorghum, by major countries or areas, 1955-57 and 1965-67--Continued

Crop and area	Production		Percentage of production		Annual rate of change between 1955-57 and 1965-67
	1955-57	1965-67	1955-57	1965-67	
	1,000 tons		Percent	Percent	Percent
Millet and sorghum:					
United States	8,594	18,150	23.2	33.6	7.7
South Asia	15,157	17,354	40.9	32.1	1.4
West Africa	6,693	7,940	18.0	14.7	1.7
East Africa	3,424	3,930	9.2	7.3	1.4
North Africa	1,893	2,558	5.1	4.7	3.1
Argentina	256	1,607	.7	3.0	19.6
Mexico	4/96	1,082	.2	2.0	40.0
Republic of South Africa	180	539	.5	1.0	11.6
Oceania	135	236	.4	.4	5.8
Other	624	643	1.7	1.2	.3
World total	37,051	54,038	100.0	100.0	3.9

1/ Data in this table may be somewhat different from data reported in individual country or area statements due to difference in source of information.
2/ Excludes the United Kingdom.
3/ Excludes the United Kingdom and Denmark.
4/ 1957 only. No production reported prior to 1957.

Table 4.--World utilization of coarse grains, 1955/56-1957/58 and 1961/62-1963/64

Type of grain and use	Developed countries 1/		Developing countries 1/		Total	
	1955/56-1957/58	1961/62-1963/64	1955/56-1957/58	1961/62-1963/64	1955/56-1957/58	1961/62-1963/64
	Million tons					
All grains	259.0	302.2	125.9	157.3	384.9	459.6
Wheat	75.4	78.9	47.5	59.3	122.9	138.2
Coarse grains	183.6	223.6	78.4	98.0	262.0	321.4
Use:						
Food	16.0	13.6	51.8	63.5	67.8	77.2
Feed	149.1	187.9	17.6	22.1	166.7	209.9
Beverage and industrial	9.7	13.6	2.4	4.4	12.1	18.0
Seed and waste	8.8	8.3	6.7	8.0	15.5	16.3
Type:						
Rye	8.2	7.4	1.2	1.1	9.4	8.6
Barley	34.9	40.8	13.3	13.6	48.3	54.4
Oats	42.3	36.3	1.4	1.4	43.7	37.7
Corn	87.7	121.3	32.3	43.3	120.0	164.6
Millet and sorghum	10.5	17.6	30.1	38.6	40.7	56.2

1/ Developed countries include North America, Western Europe, Oceania, Republic of South Africa, Japan, and Israel. Developing regions include Central and South America, Africa (excluding Republic of South Africa), and Asia (excluding Mainland China, North Korea, Vietnam, Japan, and Israel).

Source: (6, p. 11).

Table 5.--Trade in grains related to world production, averages 1956/57-1957/58 and 1964/65-1965/66

Grain	Average 1956/57-1957/58			Average 1964/65-1965/66		
	Production	Exports	Exports as percentage of production	Production	Exports	Exports as percentage of production
	- - - 1,000 tons - - -		Percent	- - - 1,000 tons - - -		Percent
Wheat	219,409	30,940	14.1	263,101	54,888	20.9
Coarse grains	352,323	18,275	5.2	409,990	38,442	9.4
Rye	35,358	905	2.6	31,765	512	1.6
Barley	65,642	7,030	10.7	89,576	6,570	7.3
Oats	59,230	1,570	2.7	42,753	1,530	3.6
Corn	150,802	7,420	4.9	195,237	24,120	12.4
Millet and sorghum	41,291	1,350	3.3	50,659	5,710	11.3

Source: Computed from tables 2 and 7. Production and export data not completely comparable in that trade among the Centrally Planned Countries is excluded from exports.

Table 6.--Gross imports of coarse grains by principal importing countries, average 1951/52-1955/56 and annual, 1956/57-1966/67 1/

Country or area	Average 1951-52-1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67
	1,000 tons											
Belgium-Luxembourg	1,172	1,547	1,515	1,484	1,597	1,439	1,566	1,576	1,477	1,640	2,145	2,539
France	623	409	353	528	219	228	500	666	487	741	672	542
West Germany	2,096	2,965	2,418	2,766	3,068	1,939	4,628	3,066	3,144	4,098	5,196	4,542
Italy	330	733	955	1,088	2,094	2,441	2,674	3,888	5,208	4,645	6,711	6,254
Netherlands	1,360	2,374	2,013	2,328	2,909	2,834	2,920	3,129	3,164	2,840	3,194	2,986
Total EEC	5,581	8,028	7,254	8,194	9,887	8,881	12,288	12,325	13,480	13,964	17,918	16,863
Austria	482	547	535	485	649	513	421	606	539	654	1,065	510
Denmark	404	458	530	1,002	1,410	846	868	840	777	752	728	701
Spain	57	92	87	129	173	683	504	831	2,019	1,553	3,146	3,094
Switzerland	365	487	415	376	490	496	384	608	562	596	652	847
United Kingdom	2,700	2,854	3,614	4,002	4,576	4,501	5,167	4,675	4,224	3,920	4,316	4,125
Eastern Europe 2/3/	238	293	350	460	615	490	185	615	1,185	1,180	1,780	1,195
Canada	138	304	215	333	313	517	786	778	578	434	551	531
Israel	95	128	234	336	343	412	394	411	459	380	485	601
India	353	---	13	122	69	190	76	---	70	121	1,100	2,295
Japan	974	1,403	1,323	1,561	1,323	1,878	2,407	2,948	4,568	5,108	5,202	7,771

1/ Includes rye, barley, oats, corn, millet and sorghum.
2/ Excludes Yugoslavia.
3/ Excludes trade among the Centrally Planned Countries.

Table 7.--Gross exports of rye, barley, oats, corn, and millet and sorghum by principal exporting countries, average 1951/52-1955/56 and annual, 1956/57-1966/67

Grain and major exporter	Average 1951/52-1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67 1/
	1,000 tons											
Rye:												
United States	76	272	90	215	134	196	190	525	225	54	96	104
Argentina	345	251	282	110	80	114	25	---	69	96	51	---
Canada	265	265	133	115	122	96	109	194	140	125	202	239
Fed. Rep. of Germany	91	35	47	145	62	325	45	6	6	2	7	23
Sweden	29	51	14	2	2	1	115	36	1	1	24	7
USSR	164	170	80	100	300	150	240	155	30	30	---	117
Total exports 2/	1,110	1,090	720	780	840	1,020	930	1,040	580	500	525	580
	Percent											
Major suppliers as percentage of total	87	96	90	88	83	86	78	88	81	62	72	84
	1,000 tons											
Barley:												
United States	915	1,249	1,893	2,447	2,488	1,809	1,787	1,404	1,466	1,268	1,618	936
Argentina	461	581	504	259	323	153	213	50	302	446	145	52
Australia	446	601	432	679	567	769	713	234	429	369	227	428
Canada	1,806	1,771	1,536	1,463	1,275	838	898	228	887	723	706	992
France	24	1,544	624	35	408	1,080	1,661	977	2,254	2,241	1,839	1,837
United Kingdom	88	12	44	137	361	124	341	185	76	111	678	1,108
Total exports 2/	5,550	7,380	6,680	6,400	6,090	5,820	7,150	4,600	6,850	6,470	6,670	6,250
	Percent											
Major suppliers as percentage of total	67	78	75	78	89	82	79	67	82	80	78	86

Continued--

Table 7.--Gross exports of rye, barley, oats, corn, and millet and sorghum by principal exporting countries, average 1951/52-1955/56 and annual, 1956/57-1966/67--Continued

Grain and major exporter	Average 1951/52-1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67 1/
	1,000 tons											
Oats:												
United States	121	361	371	433	630	389	270	331	71	60	524	246
Canada	792	284	478	123	119	35	47	318	283	190	276	79
Argentina	259	299	603	190	255	247	374	115	287	491	167	158
Australia	146	148	42	319	217	345	346	322	303	367	251	402
Total exports 2/	1,560	1,400	1,740	1,300	1,510	1,200	1,410	1,310	1,190	1,480	1,580	1,270
	Percent											
Major suppliers as percentage of total	84	78	86	82	81	85	74	83	79	75	77	70
	1,000 tons											
Corn:												
United States	2,580	3,559	4,608	5,115	5,431	6,608	9,933	10,069	11,512	13,228	17,121	12,856
Argentina	957	1,097	1,061	2,111	3,187	1,864	2,226	2,723	2,459	3,442	2,923	5,088
Mexico	12	7	---	---	---	53	2	1	---	945	1,327	1,044
Brazil	51	---	---	---	4	6	---	48	714	27	632	540
Republic of South Africa	365	859	1,233	752	351	786	1,573	2,290	2,351	588	140	439
Yugoslavia	166	13	406	393	508	385	145	86	51	21	117	797
Thailand	16	85	83	150	280	519	589	722	923	896	1,132	1,188
France	---	1	7	42	95	670	343	111	848	551	879	1,834
Total exports 2/	5,060	6,550	8,290	9,350	10,790	12,130	16,660	18,220	21,040	22,110	26,110	25,190
	Percent											
Major suppliers as percentage of total	82	86	89	92	91	90	89	88	90	89	93	94

Continued--

Table 7.--Gross exports of rye, barley, oats, corn, and millet and sorghum by principal exporting countries, average 1951/52-1955/56 and annual, 1956/57-1966/67--Continued

Grain and major exporter	Average 1951/52-1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67 1/
	1,000 tons											
Millet and sorghum:												
United States	1,199	742	1,075	2,402	2,484	2,195	2,179	3,018	2,521	3,018	6,177	7,100
Argentina	62	3/169	155	333	229	244	689	392	678	707	513	1,245
Australia	55	35	13	81	73	6	39	55	8	14	7	64
Republic of South Africa	31	11	66	39	54	53	152	17	60	108	172	200
Sudan	23	58	31	67	116	136	88	74	88	68	117	120
Morocco	33	29	15	10	---	55	25	9	55	33	34	17
Total exports 2/	1,660	1,160	1,540	3,010	3,150	2,830	3,300	3,770	3,570	4,170	7,320	9,400
	Percent											
Major suppliers as percentage of total	85	90	88	97	94	95	96	95	96	94	96	93

1/ Preliminary.
2/ Excludes trade among the Centrally Planned Countries.
3/ 1956 calendar year.

Source: (7).

Table 8.--Coarse grain production, consumption, and trade for selected base periods, and projections for 1970/71, selected countries

Area or country	Source of estimate	Base period	Production		Consumption		Net imports 1/	
			Base period	1970/71	Base period	1970/71	Base period	1970/71
			Million tons					
European Economic Community	ERS	1965/66-1966/67	30.8	36-38.	43.0	48.	12.2	10-12.
United Kingdom	do.	do.	9.7		13.0		3.3	
	(11)	1959-63	2/6.6	3/9.2	4/10.9	3/14.2	5/3.5	3/3.8
Spain	ERS	6/1967/68-1968/69	5.0	7.0	7.4	9.0	2.4	2.0
Denmark	do.	1965/66-1966/67	7/5.4	Increase	7/5.8	Increase	7/.4	Decline
Japan	do.	do.	1.4	1.	7.4	12.	6.5	11.
Argentina	do.	do.	8.8	12-12.5	4.6	Increase	-4.2	Increase exports (corn)
Brazil	do.	1965-67	11.4	13.	10.8	12.	-.6	-1.
Mexico	do.	1965/66	9.0	11-12.	7.8	Increase	-1.2	Exports of corn but imports of other feed grains
Canada	do.	do.	13.	16.	11.2	Increase	-1.8	-1.8
Australia	do.	1965/66-1966/67	3.0	---	2.2	---	-.8	-1.
	2/(8)	1958/59-1961/62	1.2	8/1.3	.7	8/.9	-.5	8/-.4
Thailand	(14)	1967	9/1.2	10/1.8	---	Increase	9/-1.2	Increase exports

Continued--

* U. S. GOVERNMENT PRINTING OFFICE : 1969—343-497/ERS-

Table 8.--Coarse grain production, consumption, and trade for selected base periods, and projections for 1970/71, selected countries--Continued

Area or country	Source of estimate	Base period	Production		Consumption		Net imports 1/	
			Base period	1970/71	Base period	1970/71	Base period	1970/71
			Million tons					
Republic of South Africa	9/(12)	1963/64-1965/66	4.4	7.8	3.9	4.8	-.5	-3.0
Eastern Europe	ERS	11/1965/66-1967/68	44.6	47.	44.4	48.5	-.2	1.5
USSR	do.	11/do.	51.8	57.	51.2	56.	-.6	-1.

1/ Includes changes in stocks.
2/ Barley and oats only.
3/ 1970 with net imports excluding grain products.
4/ Grain for livestock only.
5/ Excludes grain products.
6/ Preliminary.
7/ Excludes rye.
8/ 1969/70-1970/71.
9/ Corn only.
10/ Corn and sorghum.
11/ Production occurs in the first year and trade is calendar year data for the second year, or the year following production.

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INDICES OF

AGRICULTURAL PRODUCTION in EASTERN EUROPE and the SOVIET UNION 1950-68

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INDICES OF AGRICULTURAL PRODUCTION IN EASTERN EUROPE AND THE USSR

1950-68

Europe and Soviet Union Branch
Foreign Regional Analysis Division
Economic Research Service

INTRODUCTORY NOTES

Eastern Europe and the USSR produce and consume a large share of the world's food and fiber. Assessment of the agricultural and food situation in these areas is critical to a knowledge of world production, consumption, and trade in food and fibers. The indices presented in this publication are a part of the continuing effort of the Economic Research Service to assess the world agricultural situation, and were prepared in support of the AID-sponsored project "Analysis of Demand Prospects for Agricultural Products of Less Developed Countries." This is the first time that detailed indices for this part of the world have been published by the U.S. Department of Agriculture, although indices of aggregate output have been published for several years. 1/

The country indices were calculated by Laspeyre's base-weighted aggregative formula. In order to facilitate intra-European comparisons the weights used are estimates of 1957-59 average prices received by farmers in Western Europe, expressed in dollars per metric ton. Regional indices were computed from sums of country aggregates.

Only those agricultural products of considerable significance in the respective countries are included. The year that production data are listed is the year that the bulk of the harvest occurred.

A constant fraction of each country's aggregate value of livestock output has been subtracted to avoid double counting of commodities used as feed, and the livestock products produced from them. This constant fraction is the estimated relationship between the value of livestock products and the value of feed derived from crops calculated in Food Balances for 8 East European Countries, 1959-61, ERS-Foreign 124, Economic Research Service, U.S. Department of Agriculture, May 1965.

Most production data are official statistics of the respective East European countries and the USSR. Where necessary, especially for the USSR, these data have been adjusted to conform with crop and livestock measures of

1/ The Agricultural Situation in Communist Areas: Review of 1968 and Outlook for 1969. U.S. Dept. Agr., ERS-Foreign 259, April 1969. The Europe and Soviet Union Agricultural Situation: Review of 1967 and Outlook for 1968, ERS-Foreign 220, April 1968. The Europe and Soviet Union Agricultural Situation: Review of 1966 and Outlook for 1967, ERS-Foreign 185, May 1967.

output most commonly used. In a few cases, when data were unavailable, estimates were made by ERS specialists. Data for 1968 are preliminary.

Indices of food production were computed from aggregates for edible products contributing energy to the human diet whether actually consumed or not. Per capita indices were computed by dividing the agricultural or food indices by appropriate indices of population (1958 = 100).

The production aggregates showing value in million dollars at constant 1957-59 West European producer prices should not be confused with gross value of agricultural production, gross sales by farmers, or agriculture's contribution to gross material product. The aggregates permit year-to-year comparisons of the level of output in the various countries and the region. Trends in these aggregates should roughly parallel trends in total agricultural production.

The East European countries and the USSR customarily publish indices of the gross value of agricultural production using their own price weights. The feed contribution to livestock output is not deducted. Indices of these countries also usually value the growth in livestock herds rather than final product output. These factors, plus other methodological differences, are the major explanation for the deviation between USDA indices and the indices of these countries.

Comments or suggestions for improving this report are invited.

INDICES OF TOTAL AGRICULTURAL PRODUCTION, BY COUNTRY, 1950-68

(1957-59 = 100)

REGION AND COUNTRY	1950	1951	1952	1953	1954	1955	1956	1957	1958
BULGARIA	68	96	73	91	76	86	79	95	93
CZECHOSLOVAKIA	92	91	90	101	91	100	107	102	99
EAST GERMANY	78	93	97	97	102	94	96	100	103
HUNGARY	76	93	65	85	78	93	84	99	92
POLAND	88	78	79	81	88	86	98	99	101
ROMANIA	62	83	75	71	84	103	80	103	86
YUGOSLAVIA	51	77	45	80	65	86	68	102	84
EASTERN EUROPE	76	85	76	88	85	92	89	100	95
U.S.S.R.	74	67	76	75	78	87	97	93	106
EASTERN EUROPE AND U.S.S.R.	74	74	76	80	81	89	94	96	102

REGION AND COUNTRY	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
BULGARIA	112	110	106	110	111	127	132	155	152	134
CZECHOSLOVAKIA	98	104	101	98	108	110	95	111	113	120
EAST GERMANY	97	113	86	99	100	105	111	111	122	121
HUNGARY	109	101	96	101	104	107	110	117	119	119
POLAND	100	109	121	109	118	121	123	129	135	142
ROMANIA	111	107	111	103	107	112	123	141	139	134
YUGOSLAVIA	114	102	98	102	109	117	108	131	126	119
EASTERN EUROPE	105	107	106	104	110	115	116	127	130	130
U.S.S.R.	101	102	108	109	103	122	116	137	134	143
EASTERN EUROPE AND U.S.S.R.	102	104	107	107	106	119	116	133	133	138

TABLE 2.-- EASTERN EUROPE AND U.S.S.R.

INDICES OF PER CAPITA AGRICULTURAL PRODUCTION, BY COUNTRY, 1950-68

(1957-59 = 100)

REGION AND COUNTRY	1950	1951	1952	1953	1954	1955	1956	1957	1958
BULGARIA	72	102	78	96	79	89	81	96	93
CZECHOSLOVAKIA	100	98	96	106	95	103	109	103	99
EAST GERMANY	74	88	92	93	98	91	94	99	103
HUNGARY	80	97	68	88	79	93	84	99	92
POLAND	102	89	88	89	95	91	101	101	101
ROMANIA	69	91	81	97	89	107	82	104	86
YUGOSLAVIA	56	84	48	85	68	88	69	103	84
EASTERN EUROPE	82	91	80	92	88	94	90	101	95
U.S.S.R.	85	76	84	82	84	92	100	95	106
EASTERN EUROPE AND U.S.S.R.	83	84	83	86	86	93	97	97	102

REGION AND COUNTRY	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
BULGARIA	111	108	103	106	106	120	124	145	141	124
CZECHOSLOVAKIA	97	103	99	95	104	105	90	105	106	113
EAST GERMANY	97	114	87	100	101	107	113	113	124	123
HUNGARY	108	100	95	99	102	104	107	114	115	114
POLAND	98	106	116	103	111	112	112	117	122	127
ROMANIA	110	105	108	100	103	107	117	133	130	125
YUGOSLAVIA	113	100	95	98	103	109	100	120	114	106
EASTERN EUROPE	104	105	104	101	106	110	110	120	122	121
U.S.S.R.	99	98	102	102	95	111	104	121	118	124
EASTERN EUROPE AND U.S.S.R.	101	101	103	101	99	110	106	120	119	123

INDICES OF TOTAL FOOD PRODUCTION, BY COUNTRY, 1950-68

(1957-59 = 100)

REGION AND COUNTRY	1950	1951	1952	1953	1954	1955	1956	1957	1958
BULGARIA	66	94	73	89	73	86	80	96	94
CZECHOSLOVAKIA	96	91	92	102	91	98	106	103	99
EAST GERMANY	78	93	97	97	102	94	96	100	103
HUNGARY	77	92	66	83	78	93	83	100	92
POLAND	87	76	78	81	87	85	96	98	101
ROMANIA	59	78	73	88	82	101	77	102	86
YUGOSLAVIA	50	77	45	80	61	82	66	100	83
EASTERN EUROPE	76	83	76	87	84	90	88	100	95
U.S.S.R.	75	67	77	75	78	87	98	93	106
EASTERN EUROPE AND U.S.S.R.	75	73	77	79	80	89	94	96	102

REGION AND COUNTRY	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
BULGARIA	111	111	109	112	112	125	135	157	157	139
CZECHOSLOVAKIA	98	104	101	97	106	108	95	112	114	122
EAST GERMANY	97	114	86	99	100	105	111	111	122	121
HUNGARY	108	103	97	103	104	106	109	116	119	120
POLAND	101	109	120	107	117	120	122	129	132	139
ROMANIA	112	108	113	104	108	113	125	143	141	137
YUGOSLAVIA	118	106	100	103	112	118	108	134	131	126
EASTERN EUROPE	105	108	107	104	110	115	116	127	130	131
U.S.S.R.	100	102	109	110	102	123	114	138	134	143
EASTERN EUROPE AND U.S.S.R.	102	104	108	107	105	120	115	134	133	139

TABLE 4.-- EASTERN EUROPE AND U.S.S.R.

INDICES OF PER CAPITA FOOD PRODUCTION, BY COUNTRY, 1950-68

(1957-59 = 100)

REGION AND COUNTRY	1950	1951	1952	1953	1954	1955	1956	1957	1958
BULGARIA	70	100	78	94	76	89	82	97	94
CZECHOSLOVAKIA	104	98	98	107	95	101	108	104	99
EAST GERMANY	74	88	92	93	98	91	94	99	103
HUNGARY	81	96	69	85	79	93	83	100	92
POLAND	101	86	87	89	93	90	99	100	101
ROMANIA	65	85	79	94	87	105	79	103	86
YUGOSLAVIA	55	84	48	85	64	84	67	101	83
EASTERN EUROPE	82	89	80	91	87	92	89	101	95
U.S.S.R.	86	76	85	82	84	92	101	95	106
EASTERN EUROPE AND U.S.S.R.	84	81	84	85	85	92	97	97	102

REGION AND COUNTRY	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
BULGARIA	110	109	106	108	107	119	127	147	146	128
CZECHOSLOVAKIA	97	103	99	94	102	103	90	106	107	114
EAST GERMANY	97	115	87	100	101	107	113	113	124	123
HUNGARY	107	102	96	101	102	103	106	113	115	115
POLAND	99	106	115	101	110	111	111	117	119	124
ROMANIA	111	106	110	100	104	108	119	135	132	128
YUGOSLAVIA	117	104	97	98	106	110	100	122	118	113
EASTERN EUROPE	104	106	104	101	106	110	110	120	122	122
U.S.S.R.	98	98	103	103	94	112	102	122	118	124
EASTERN EUROPE AND U.S.S.R.	101	101	104	101	98	111	105	121	119	124

AGGREGATES OF TOTAL AGRICULTURAL PRODUCTION, BY COUNTRY, AVERAGE 1957-59, ANNUAL 1950-68

REGION AND COUNTRY	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	-MILLION DOLLARS AT CONSTANT PRICES-									
BULGARIA	868.8	593.9	832.7	638.2	792.8	660.6	743.5	686.4	828.1	805.9
CZECHOSLOVAKIA	1,367.2	1,264.0	1,237.8	1,233.4	1,386.0	1,244.4	1,360.7	1,456.2	1,400.9	1,355.5
EAST GERMANY	1,882.5	1,476.6	1,748.7	1,831.6	1,833.8	1,928.9	1,776.2	1,814.3	1,887.7	1,935.3
HUNGARY	1,267.3	962.3	1,176.1	826.7	1,078.0	988.7	1,181.6	1,062.6	1,253.2	1,165.6
POLAND	4,255.8	3,731.1	3,323.0	3,369.2	3,458.3	3,749.2	3,665.9	4,157.5	4,206.4	4,295.0
ROMANIA	1,740.1	1,071.7	1,451.8	1,312.7	1,578.3	1,467.8	1,785.1	1,386.7	1,794.3	1,496.3
YUGOSLAVIA	1,834.3	944.6	1,414.8	831.0	1,461.7	1,192.7	1,586.2	1,250.0	1,866.0	1,542.5
EASTERN EUROPE	13,216.0	10,044.2	11,184.9	10,042.8	11,588.9	11,232.3	12,099.2	11,813.7	13,236.6	12,596.1
U.S.S.R.	22,343.7	16,436.4	15,004.0	17,011.0	16,769.3	17,337.3	19,407.8	21,765.8	20,844.6	23,648.2
EASTERN EUROPE AND U.S.S.R.	35,559.7	26,440.6	26,188.9	27,053.8	28,358.2	28,926.2	31,507.0	33,579.5	34,081.2	36,244.3

REGION AND COUNTRY	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	-MILLION DOLLARS AT CONSTANT PRICES-										
BULGARIA	868.8	972.4	952.2	925.2	956.9	963.5	1,100.1	1,149.4	1,350.7	1,324.8	1,162.7
CZECHOSLOVAKIA	1,367.2	1,343.7	1,423.0	1,383.1	1,333.3	1,470.0	1,504.5	1,305.1	1,513.8	1,546.4	1,644.0
EAST GERMANY	1,882.5	1,824.5	2,136.1	1,625.0	1,864.3	1,873.9	1,968.0	2,083.6	2,081.9	2,292.6	2,270.6
HUNGARY	1,267.3	1,382.9	1,279.0	1,221.4	1,281.2	1,322.2	1,361.2	1,387.7	1,476.9	1,512.7	1,504.8
POLAND	4,255.8	4,265.7	4,637.5	5,136.7	4,648.9	5,005.4	5,149.9	5,241.5	5,499.2	5,740.7	6,044.0
ROMANIA	1,740.1	1,929.2	1,863.6	1,930.1	1,789.6	1,867.5	1,946.2	2,135.5	2,455.2	2,425.5	2,333.9
YUGOSLAVIA	1,834.3	2,093.9	1,865.8	1,793.0	1,870.1	2,005.2	2,138.0	1,986.9	2,398.8	2,314.0	2,184.9
EASTERN EUROPE	13,216.0	13,812.3	14,157.2	14,014.5	13,744.3	14,507.7	15,167.9	15,289.7	16,776.5	17,156.7	17,144.9
U.S.S.R.	22,343.7	22,537.7	22,787.2	24,189.0	24,408.1	23,010.3	27,292.4	25,834.4	30,646.3	30,043.7	31,909.3
EASTERN EUROPE AND U.S.S.R.	35,559.7	36,350.0	36,944.5	38,203.5	38,152.4	37,518.0	42,460.3	41,124.1	47,422.8	47,200.4	49,054.2

TABLE 6.-- EASTERN EUROPE AND U.S.S.R.

AGGREGATES OF TOTAL FOOD PRODUCTION, BY COUNTRY, AVERAGE 1957-59, ANNUAL 1950-68

REGION AND COUNTRY	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	-MILLION DOLLARS AT CONSTANT PRICES-									
BULGARIA	728.4	477.2	682.1	528.3	651.5	534.2	625.3	585.0	696.8	683.0
CZECHOSLOVAKIA	1,284.0	1,236.0	1,170.8	1,178.7	1,313.7	1,165.0	1,259.2	1,355.3	1,327.4	1,265.1
EAST GERMANY	1,858.0	1,457.8	1,729.2	1,802.9	1,807.8	1,895.3	1,745.8	1,789.5	1,862.2	1,911.0
HUNGARY	1,146.7	880.8	1,060.1	752.3	956.9	894.1	1,070.1	947.8	1,142.9	1,059.3
POLAND	4,016.7	3,503.9	3,054.9	3,150.5	3,268.8	3,510.1	3,400.2	3,856.1	3,935.4	4,058.5
ROMANIA	1,597.6	937.1	1,241.8	1,162.9	1,398.7	1,307.2	1,611.9	1,224.2	1,630.8	1,370.8
YUGOSLAVIA	1,589.9	791.3	1,230.5	716.4	1,264.8	962.0	1,297.8	1,053.6	1,586.4	1,313.5
EASTERN EUROPE	12,221.3	9,284.1	10,169.4	9,292.0	10,662.2	10,267.9	11,010.3	10,811.5	12,181.9	11,661.2
U.S.S.R.	20,189.7	15,062.8	13,603.9	15,547.7	15,093.2	15,741.2	17,538.7	19,692.0	18,801.8	21,493.3
EASTERN EUROPE AND U.S.S.R.	32,411.0	24,346.9	23,773.3	24,839.7	25,755.4	26,009.1	28,549.0	30,503.5	30,983.7	33,154.5

REGION AND COUNTRY	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	-MILLION DOLLARS AT CONSTANT PRICES-										
BULGARIA	728.4	805.8	807.1	796.8	812.3	818.0	911.3	983.7	1,145.2	1,143.1	1,011.5
CZECHOSLOVAKIA	1,284.0	1,258.5	1,331.3	1,291.4	1,241.6	1,355.6	1,391.3	1,216.0	1,434.5	1,461.8	1,568.4
EAST GERMANY	1,858.0	1,800.9	2,113.5	1,606.6	1,844.3	1,853.9	1,947.4	2,065.5	2,063.0	2,274.2	2,252.2
HUNGARY	1,146.7	1,237.6	1,186.4	1,113.8	1,176.2	1,193.7	1,221.1	1,244.4	1,331.6	1,367.4	1,376.4
POLAND	4,016.7	4,055.8	4,377.7	4,824.2	4,301.9	4,696.1	4,837.9	4,899.7	5,162.0	5,312.2	5,601.3
ROMANIA	1,597.6	1,791.3	1,728.2	1,805.3	1,656.9	1,732.9	1,810.2	1,998.9	2,285.4	2,253.0	2,188.2
YUGOSLAVIA	1,589.9	1,869.7	1,682.0	1,584.9	1,643.1	1,775.2	1,879.4	1,719.5	2,135.9	2,081.2	2,001.5
EASTERN EUROPE	12,221.3	12,819.6	13,226.2	13,023.0	12,676.3	13,425.4	13,998.6	14,127.7	15,557.6	15,892.9	15,999.5
U.S.S.R.	20,189.7	20,273.6	20,570.7	21,919.4	22,144.4	20,492.9	24,780.9	23,117.0	27,772.9	27,108.6	28,946.4
EASTERN EUROPE AND U.S.S.R.	32,411.0	33,093.2	33,796.9	34,942.4	34,820.7	33,918.3	38,779.5	37,244.7	43,330.5	43,001.5	44,945.9

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS	-1,000 METRIC TONS-									
WHEAT	93	2,381	1,757	2,499	2,041	2,334	1,651	1,920	1,717	2,395	2,322
RYE	86	113	258	313	262	244	151	173	133	130	102
RICE, PADDY	102	44	40	46	44	61	59	49	56	57	45
CORN	80	1,293	654	1,279	487	961	974	1,492	1,055	1,492	882
BARLEY	75	494	326	502	429	505	340	471	344	478	444
OATS	70	194	121	228	176	195	166	161	135	205	134
OTHER GRAINS	70	16	20	33	20	24	18	21	13	18	13
PULSES	180	94	55	126	49	83	83	139	103	102	69
POTATOES	40	328	150	421	268	325	267	364	212	313	251
SUGAR BEETS	15	1,255	332	839	381	782	650	596	943	1,434	882
TOBACCO	656	88	42	63	44	57	55	71	57	82	83
COTTON	274	49	32	63	38	86	84	61	40	49	47
HEMP	650	56	89	105	77	89	66	48	37	51	42
RAPESEED	140	1	11	23	30	24	1	6	1	0	2
SUNFLOWER SEED	140	236	162	258	184	223	240	253	193	209	221
OTHER OILSEEDS	140	5	14	20	9	14	12	11	7	5	5
VEGETABLES	65	676	252	429	420	506	397	441	584	582	695
FRUIT	100	460	322	263	372	481	248	193	502	214	478
GRAPES	48	716	466	606	394	492	430	531	399	572	888
FLAX FIBER	650	16	6	8	5	8	9	8	14	17	9
BEEF AND VEAL	742	61	39	38	37	38	38	45	58	59	64
MUTTON AND LAMB	971	46	41	38	45	34	41	35	41	44	45
PORK	680	131	73	72	65	111	127	104	108	107	149
POULTRY MEAT	833	30	16	16	24	22	18	20	23	23	29
OTHER MEAT	807	3	1	1	0	1	1	1	2	2	3
MILK	76	977	665	672	638	629	662	743	798	912	988
WOOL, GREASY BASIS	1,320	17	14	14	13	13	14	14	15	15	17
EGGS	707	51	33	37	42	44	45	45	47	49	51
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-									
CROPS		715.8	492.7	731.9	534.3	679.4	538.7	625.4	555.6	691.3	647.1
LIVESTOCK		339.9	224.7	224.0	230.8	251.9	270.8	262.4	290.6	303.8	352.7
LIVESTOCK FEED DEDUCTION	.55	-186.9	-123.5	-123.2	-126.9	-138.5	-148.9	-144.3	-159.8	-167.0	-193.9
TOTAL AGRICULTURE		868.8	593.9	832.7	638.2	792.8	660.6	743.5	686.4	828.1	805.9
TOTAL FOOD		728.4	477.2	682.1	528.3	651.5	534.2	625.3	585.0	696.8	683.0
INDICES OF PRODUCTION		(1957-59 = 100)									
CROPS		100	69	102	75	95	75	87	78	97	90
TOTAL AGRICULTURE		100	68	96	73	91	76	86	79	95	93
TOTAL FOOD		100	66	94	73	89	73	86	80	96	94
PER CAPITA AGRICULTURE		100	72	102	78	96	79	89	81	96	93
PER CAPITA FOOD		100	70	100	78	94	76	89	82	97	94
INDEX OF POPULATION											
1958 POPULATION= 7,728,000		100.0	93.8	93.9	94.1	95.1	96.1	97.0	98.0	99.0	100.0

TABLE 7.--BULGARIA (CONTINUED)

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DOLLARS	-1,000 METRIC TONS-										
WHEAT	93	2,381	2,426	2,379	2,028	2,081	1,892	2,118	2,921	3,193	3,254	2,530
RYE	86	113	107	82	70	49	56	64	52	56	38	22
RICE, PADDY	102	44	29	32	36	39	42	32	34	48	52	43
CORN	80	1,293	1,506	1,505	1,424	1,556	1,732	2,056	1,238	2,207	1,971	1,680
BARLEY	75	494	560	622	612	599	618	764	876	1,064	985	810
OATS	70	194	244	218	207	114	133	149	104	182	180	78
OTHER GRAINS	70	16	17	12	8	5	5	5	3	2	3	2
PULSES	180	94	110	119	89	57	95	136	108	193	176	140
POTATOES	40	328	421	478	445	361	415	497	285	421	381	350
SUGAR BEETS	15	1,255	1,450	1,650	1,463	1,121	1,122	2,100	1,392	2,528	2,032	1,460
TOBACCO	656	88	99	62	56	107	105	150	123	132	116	110
COTTON	274	49	52	64	24	49	40	43	38	69	56	30
HEMP	650	56	74	69	69	38	39	51	46	77	63	38
RAPESEED	140	1	1	5	15	6	1	2	1	0	0	0
SUNFLOWER SEED	140	236	279	344	301	357	336	337	357	423	478	435
OTHER OILSEEDS	140	5	5	5	4	3	1	1	2	2	2	2
VEGETABLES	65	676	751	930	1,008	1,057	971	1,076	1,034	1,134	1,300	1,150
FRUIT	100	460	688	561	789	710	796	786	1,166	990	1,000	960
GRAPES	48	716	689	589	579	1,000	1,094	826	1,215	977	950	1,300
FLAX FIBER	650	16	22	22	15	9	13	19	16	26	21	12
BEEF AND VEAL	742	61	61	37	52	67	72	72	78	91	93	94
MUTTON AND LAMB	971	46	50	45	49	58	56	68	74	84	85	86
PORK	680	131	137	134	152	146	123	138	188	181	183	187
POULTRY MEAT	833	30	37	36	38	36	36	40	44	48	60	64
OTHER MEAT	807	3	4	4	7	3	2	1	2	2	2	2
MILK	76	977	1,031	1,114	1,189	1,127	1,171	1,303	1,388	1,501	1,610	1,565
WOOL, GREASY BASIS	1,320	17	19	21	23	23	24	25	26	25	27	29
EGGS	707	51	54	68	78	74	70	74	81	83	94	95
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		715.8	809.1	792.0	743.9	774.1	786.5	905.8	927.5	1,116.8	1,076.4	910.8
LIVESTOCK		339.9	362.8	356.0	402.8	406.1	393.2	431.6	493.0	519.6	552.0	559.7
LIVESTOCK FEED DEDUCTION	.55	-186.9	-199.5	-195.8	-221.5	-223.3	-216.2	-237.3	-271.1	-285.7	-303.6	-307.8
TOTAL AGRICULTURE		868.8	972.4	952.2	925.2	956.9	963.5	1,100.1	1,149.4	1,350.7	1,324.8	1,162.7
TOTAL FOOD		728.4	805.8	807.1	796.8	812.3	818.0	911.3	983.7	1,145.2	1,143.1	1,011.5
INDICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	113	111	104	108	110	127	130	156	150	127
TOTAL AGRICULTURE		100	112	110	106	110	111	127	132	155	152	134
TOTAL FOOD		100	111	111	109	112	112	125	135	157	157	139
PER CAPITA AGRICULTURE		100	111	108	103	106	106	120	124	145	141	124
PER CAPITA FOOD		100	110	109	106	108	107	119	127	147	146	128
INDEX OF POPULATION 1958 POPULATION= 7,728,000		100.0	100.9	101.8	102.8	103.7	104.5	105.4	106.1	106.8	107.6	108.4

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS					-1,000 METRIC TONS-					
WHEAT	93	1,507	1,430	1,476	1,573	1,556	1,107	1,473	1,541	1,525	1,346
RYE	86	951	1,147	1,015	930	954	803	968	1,050	948	937
CORN	80	476	218	302	212	430	382	391	399	445	479
BARLEY	75	1,343	1,030	1,143	1,137	1,247	1,115	1,291	1,408	1,362	1,199
OATS	70	900	895	929	927	869	866	974	1,034	899	871
PULSES	180	19	24	33	24	37	33	34	29	18	18
POTATOES	40	7,226	8,156	7,356	7,924	9,702	8,314	7,905	9,635	8,756	6,589
SUGAR BEETS	15	6,222	6,296	5,203	4,760	5,588	5,603	6,152	4,585	6,775	6,946
TOBACCO	656	8	6	8	9	12	11	13	10	9	8
RAPESEED	140	53	20	42	30	26	21	43	48	39	48
VEGETABLES	65	795	760	770	750	780	780	944	750	800	819
FRUIT	100	499	612	425	307	710	519	463	565	343	757
GRAPES	48	71	70	74	34	35	68	72	34	70	93
FLAX FIBER	650	117	35	93	73	97	109	141	143	100	129
BEEF AND VEAL	742	179	168	162	173	174	156	158	169	180	178
MUTTON AND LAMB	941	3	2	2	2	2	2	2	2	3	3
PORK	680	350	294	216	253	227	243	287	329	350	347
POULTRY MEAT	833	19	0	0	0	0	0	0	0	0	14
COW'S MILK	76	3,759	3,271	3,554	3,587	3,243	3,264	3,520	3,711	3,741	3,764
WOOL, GREASY BASIS	1,320	1	1	1	1	1	1	1	1	2	1
EGGS	707	115	88	97	94	112	96	95	105	113	114
AGGREGATES OF PRODUCTION						-MILLION DOLLARS AT CONSTANT PRICES-					
CROPS		1,003.4	957.4	945.4	924.9	1,092.0	956.3	1,048.5	1,116.1	1,045.1	995.2
LIVESTOCK		757.8	638.6	609.0	642.7	612.4	600.2	650.3	708.5	741.2	750.6
LIVESTOCK FEED DEDUCTION	.52	-394.0	-332.0	-316.6	-334.2	-318.4	-312.1	-338.1	-368.4	-385.4	-390.3
TOTAL AGRICULTURE		1,367.2	1,264.0	1,237.8	1,233.4	1,386.0	1,244.4	1,360.7	1,456.2	1,400.9	1,355.5
TOTAL FOOD		1,284.0	1,236.0	1,170.8	1,178.7	1,313.7	1,165.0	1,259.2	1,355.3	1,327.4	1,265.1
INDICES OF PRODUCTION						(1957-59 = 100)					
CROPS		100	95	94	92	109	95	104	111	104	99
TOTAL AGRICULTURE		100	92	91	90	101	91	100	107	102	99
TOTAL FOOD		100	96	91	92	102	91	98	106	103	99
PER CAPITA AGRICULTURE		100	100	98	96	106	95	103	109	103	99
PER CAPITA FOOD		100	104	98	98	107	95	101	108	104	99
INDEX OF POPULATION 1958 POPULATION= 13,474,000		99.9	91.9	93.0	94.1	95.1	96.1	97.2	98.2	99.1	100.0

TA8LE 8.--CZECHOSLOVAKIA (CONTINUED)

PRODUCTIDN 8Y COMMODITY, VALUE AND INOICES OF TOTAL AGRICULTURAL AND FOOD PRDDUCTIDN, AVERAGE 1957-59, ANNUAL 1950-68

COMMDOITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DDLLARS	-1,000 METRIC TONS-										
WHEAT	93	1,507	1,649	1,503	1,666	1,644	1,766	1,829	1,992	2,247	2,516	3,128
RYE	86	951	967	895	994	916	880	870	882	790	689	761
CORN	80	476	503	572	461	471	578	465	393	476	421	447
8ARLEY	75	1,343	1,467	1,745	1,581	1,752	1,620	1,429	1,399	1,608	1,936	2,093
OATS	70	900	929	1,020	959	905	797	669	630	746	766	874
PULSES	180	19	20	25	25	29	41	46	44	35	32	33
POTATOES	40	7,226	6,334	5,093	5,331	5,002	6,506	7,656	3,678	5,846	5,590	5,836
SUGAR 8EETS	15	6,222	4,946	8,368	6,894	5,811	8,018	7,474	5,662	7,762	7,661	7,080
TO8ACCO	656	8	6	5	5	6	8	9	5	8	8	10
RAPESEED	140	53	73	55	84	48	41	46	74	78	84	82
VEGETA8LES	65	795	766	854	721	812	969	984	835	980	981	980
FRUIT	100	499	396	826	474	269	399	350	222	567	400	480
GRAPES	48	71	49	56	62	43	66	100	39	59	45	52
FLAX FI8ER	650	117	123	134	134	133	164	161	128	110	116	100
8EEF AND VEAL	742	179	178	193	198	218	210	228	230	251	268	268
MUTTON AND LAM8	941	3	3	3	2	2	1	1	1	0	0	0
PORK	680	350	352	351	368	371	376	394	442	415	420	424
POULTRY MEAT	833	19	43	46	49	48	50	55	53	58	68	81
COW'S MILK	76	3,759	3,771	3,829	3,945	3,664	3,535	3,763	3,924	4,169	4,335	4,559
WOOL, GREASY 8ASIS	1,320	1	1	1	1	1	2	2	2	2	3	3
EGGS	707	115	117	124	129	131	138	148	165	169	171	166
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		1,003.4	968.9	1,037.5	983.6	935.6	1,074.9	1,083.5	856.8	1,055.1	1,068.5	1,153.1
LIVESTOCK		757.8	780.7	803.0	832.1	828.4	823.0	877.0	933.8	955.6	995.5	1,022.6
LIVESTOCK FEED DEDUCTION	.52	-394.0	-405.9	-417.5	-432.6	-430.7	-427.9	-456.0	-485.5	-496.9	-517.6	-531.7
TOTAL AGRICULTURE		1,367.2	1,343.7	1,423.0	1,383.1	1,333.3	1,470.0	1,504.5	1,305.1	1,513.8	1,546.4	1,644.0
TOTAL FOOD		1,284.0	1,258.5	1,331.3	1,291.4	1,241.6	1,355.6	1,391.3	1,216.0	1,434.5	1,461.8	1,568.4
INOICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	97	103	98	93	107	108	85	105	106	115
TOTAL AGRICULTURE		100	98	104	101	98	108	110	95	111	113	120
TOTAL FOOD		100	98	104	101	97	106	108	95	112	114	122
PER CAPITA AGRICULTURE		100	97	103	99	95	104	105	90	105	106	113
PER CAPITA FOOD		100	97	103	99	94	102	103	90	106	107	114
INDEX OF POPULATION 1958 POPULATION= 13,474,000		99.9	100.7	101.3	102.3	102.9	103.5	104.3	105.1	105.7	106.2	106.6

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS					-1,000 METRIC TONS-					
WHEAT	93	1,331	1,214	1,494	1,442	1,152	1,081	1,211	1,086	1,259	1,363
RYE	86	2,244	2,418	2,992	2,862	2,292	2,394	2,337	2,299	2,231	2,368
BARLEY	75	956	587	746	685	806	749	924	834	897	931
OATS	70	1,036	1,127	1,556	1,430	1,446	1,128	1,362	1,112	999	1,143
OTHER GRAINS	70	463	279	384	364	355	309	335	415	445	507
PULSES	180	25	104	108	59	40	37	34	31	25	27
POTATOES	40	12,821	14,706	14,782	13,935	13,273	15,520	11,194	13,565	14,529	11,498
SUGAR BEETS	15	6,033	5,754	6,048	6,336	6,062	6,952	5,712	4,324	6,465	6,976
HEMP	650	17	23	25	29	23	32	27	16	19	16
RAPESEED	140	165	120	174	104	114	109	197	166	179	128
OTHER OILSEEDS	140	6	34	34	37	45	39	21	16	8	5
VEGETABLES	65	726	0	0	0	800	825	890	850	850	856
FRUIT	100	492	0	0	569	824	848	423	469	0	1,081
FLAX FIBER	48	53	80	67	66	65	76	75	79	53	68
BEEF AND VEAL	742	167	79	108	137	150	143	147	144	159	156
PORK	680	682	313	452	593	640	627	663	667	701	705
POULTRY MEAT	833	40	18	25	32	35	33	32	30	36	40
OTHER MEAT	807	32	16	22	28	31	29	34	33	31	31
COW'S MILK	76	5,589	2,877	3,719	4,292	4,143	4,595	4,962	4,986	5,286	5,656
WOOL, GREASY BASIS	1,320	8	0	0	5	6	7	7	8	8	8
EGGS	707	163	0	73	88	106	109	112	132	151	166
AGGREGATES OF PRODUCTION						-MILLION DOLLARS AT CONSTANT PRICES-					
CROPS		1,235.5	1,196.8	1,338.1	1,319.0	1,294.6	1,378.6	1,193.2	1,223.1	1,256.5	1,281.1
LIVESTOCK		1,198.1	518.0	760.3	949.2	998.4	1,018.9	1,079.5	1,094.8	1,168.8	1,211.4
LIVESTOCK FEED DEDUCTION	.46	-551.1	-238.2	-349.7	-436.6	-459.2	-468.6	-496.5	-503.6	-537.6	-557.2
TOTAL AGRICULTURE		1,882.5	1,476.6	1,748.7	1,831.6	1,833.8	1,928.9	1,776.2	1,814.3	1,887.7	1,935.3
TOTAL FOOD		1,858.0	1,457.8	1,729.2	1,802.9	1,807.8	1,895.3	1,745.8	1,789.5	1,862.2	1,911.0
INDICES OF PRODUCTION						(1957-59 = 100)					
CROPS		100	97	108	107	105	112	97	99	102	104
TOTAL AGRICULTURE		100	78	93	97	97	102	94	96	100	103
TOTAL FOOD		100	78	93	97	97	102	94	96	100	103
PER CAPITA AGRICULTURE		100	74	88	92	93	98	91	94	99	103
PER CAPITA FOOD		100	74	88	92	93	98	91	94	99	103
INDEX OF POPULATION 1958 POPULATION= 17,355,000		100.2	106.0	105.7	105.6	104.7	104.1	103.4	102.1	100.9	100.0

TABLE 9.--EAST GERMANY (CONTINUED)

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DOLLARS	-1,000 METRIC TONS-										
WHEAT	93	1,331	1,371	1,456	1,038	1,315	1,280	1,348	1,802	1,521	2,012	2,050
RYE	86	2,244	2,133	2,126	1,504	1,726	1,675	1,890	1,910	1,642	1,986	1,950
BARLEY	75	956	1,039	1,269	947	1,164	1,197	1,496	1,651	1,525	1,927	1,950
OATS	70	1,036	966	1,036	855	1,054	807	775	758	703	845	850
OTHER GRAINS	70	463	438	521	498	677	576	675	610	525	583	520
PULSES	180	25	22	33	35	44	34	38	38	23	25	25
POTATOES	40	12,821	12,436	14,821	8,430	13,284	12,886	12,872	12,857	12,823	14,065	13,160
SUGAR BEETS	15	6,033	4,659	6,837	4,657	4,970	6,176	6,003	5,804	6,611	6,948	6,560
HEMP	650	17	17	14	7	11	11	13	8	9	8	8
RAPESEED	140	165	189	182	173	165	128	176	214	209	271	270
OTHER OILSEEDS	140	6	6	12	6	18	10	8	10	10	8	10
VEGETABLES	65	726	472	790	760	790	774	734	802	923	718	720
FRUIT	100	492	396	1,272	449	717	626	445	528	694	831	831
FLAX FIBER	48	53	39	60	66	74	46	31	47	51	54	55
BEEF AND VEAL	742	167	187	208	233	229	213	226	244	276	298	310
PORK	680	682	641	674	676	537	650	748	798	818	842	876
POULTRY MEAT	833	40	45	53	58	58	64	64	64	65	69	76
OTHER MEAT	807	32	33	35	31	29	30	31	25	24	22	22
COW'S MILK	76	5,589	5,826	5,930	5,612	5,216	5,569	5,750	6,371	6,728	6,904	6,940
WOOL, GREASY BASIS	1,320	8	8	8	8	7	8	8	8	8	8	8
EGGS	707	163	172	198	198	170	179	203	216	214	220	219
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		1,235.5	1,169.0	1,441.5	932.1	1,252.6	1,205.4	1,241.3	1,303.5	1,267.7	1,450.3	1,406.8
LIVESTOCK		1,198.1	1,213.8	1,286.2	1,283.0	1,132.6	1,237.9	1,345.7	1,444.6	1,507.7	1,559.8	1,599.6
LIVESTOCK FEED DEDUCTION	.46	-551.1	-558.3	-591.6	-590.1	-520.9	-569.4	-619.0	-664.5	-693.5	-717.5	-735.8
TOTAL AGRICULTURE		1,882.5	1,824.5	2,136.1	1,625.0	1,864.3	1,873.9	1,968.0	2,083.6	2,081.9	2,292.6	2,270.6
TOTAL FOOD		1,858.0	1,800.9	2,113.5	1,606.6	1,844.3	1,853.9	1,947.4	2,065.5	2,063.0	2,274.2	2,252.2
INDICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	95	117	75	101	98	100	106	103	117	114
TOTAL AGRICULTURE		100	97	113	86	99	100	105	111	111	122	121
TOTAL FOOD		100	97	114	86	99	100	105	111	111	122	121
PER CAPITA AGRICULTURE		100	97	114	87	100	101	107	113	113	124	123
PER CAPITA FOOD		100	97	115	87	100	101	107	113	113	124	123
INDEX OF POPULATION 1958 POPULATION= 17,355,000		100.2	99.7	99.3	98.7	98.5	98.8	97.9	98.1	98.3	98.4	98.6

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS					1,000 METRIC TONS					
WHEAT	93	1,785	2,085	2,351	1,699	2,182	1,661	2,131	1,845	1,959	1,487
RYE	86	434	769	790	542	562	480	544	494	487	371
RICE, PADDY	102	73	50	44	49	66	68	40	96	86	73
CORN	80	3,208	1,805	2,833	1,172	2,602	2,550	2,912	2,034	3,233	2,833
BARLEY	75	930	604	723	567	757	587	794	645	962	735
OATS	70	237	167	188	134	164	150	176	176	263	192
PULSES	180	61	40	55	40	32	40	65	54	77	34
POTATOES	40	2,558	1,350	2,052	1,170	1,901	1,991	2,467	2,055	2,707	2,600
SUGAR BEETS	15	2,209	1,640	2,712	1,308	2,523	1,924	2,241	1,948	1,878	2,070
TOBACCO	656	30	20	27	17	24	17	23	28	37	31
HEMP	650	124	83	128	77	134	105	123	115	101	109
RAPESEED	140	2	5	3	3	3	1	3	2	1	2
SUNFLOWER SEED	140	102	237	295	154	294	185	187	152	90	100
OTHER OILSEEDS	140	12	15	22	8	14	11	8	8	12	10
VEGETABLES	65	492	164	457	261	488	431	590	447	598	356
FRUIT	100	798	378	378	378	378	378	392	492	691	795
GRAPES	48	660	611	552	464	320	327	561	402	535	890
FLAX FIBER	650	16	14	15	12	18	11	13	19	17	9
BEEF AND VEAL	742	113	96	68	76	78	77	83	97	108	109
MUTTON AND LAMB	971	8	8	5	6	7	8	7	8	7	8
PORK	680	245	194	155	208	140	190	217	245	215	241
POULTRY MEAT	833	122	87	115	113	74	93	119	116	118	122
OTHER MEAT	807	13	3	9	5	5	3	7	11	6	10
COW'S MILK	76	1,908	1,446	1,452	1,424	1,364	1,455	1,526	1,518	1,782	1,952
WOOL, GREASY BASIS	1,320	7	4	4	4	5	6	6	7	7	7
EGGS	707	95	55	54	59	37	56	72	85	88	95
AGGREGATES OF PRODUCTION						MILLION DOLLARS AT CONSTANT PRICES					
CROPS		970.6	742.3	967.2	598.2	897.0	772.6	933.8	794.3	981.7	872.0
LIVESTOCK		593.3	439.9	417.8	456.9	362.0	432.1	495.5	536.6	543.0	587.1
LIVESTOCK FEED DEDUCTION	.50	-296.6	-219.9	-208.9	-228.4	-181.0	-216.0	-247.7	-268.3	-271.5	-293.5
TOTAL AGRICULTURE		1,267.3	962.3	1,176.1	826.7	1,078.0	988.7	1,181.6	1,062.6	1,253.2	1,165.6
TOTAL FOOD		1,146.7	880.8	1,060.1	752.3	956.9	894.1	1,070.1	947.8	1,142.9	1,059.3
INDICES OF PRODUCTION						(1957-59 = 100)					
CROPS		100	76	100	62	92	80	96	82	101	90
TOTAL AGRICULTURE		100	76	93	65	85	78	93	84	99	92
TOTAL FOOD		100	77	92	66	83	78	93	83	100	92
PER CAPITA AGRICULTURE		100	80	97	68	88	79	93	84	99	92
PER CAPITA FOOD		100	81	96	69	85	79	93	83	100	92
INDEX OF POPULATION 1958 POPULATION= 9,882,000		100.0	94.5	95.4	96.2	97.1	98.2	99.4	100.3	99.6	100.0

TA8LE 10.--HUNGARY (CONTINUED)

PROOUCTION 8Y COMMOOITY, VALUE ANO INOICES OF TOTAL AGRICULTURAL ANO FOOO PROOUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMOOITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	OOLLARS	-1,000 METRIC TONS-										
WHEAT	93	1,785	1,909	1,768	1,936	1,959	1,523	2,059	2,347	2,192	2,718	2,829
RYE	86	434	443	355	297	233	215	265	288	242	225	238
RICE, PAOOY	102	73	59	45	38	36	48	35	21	31	43	46
CORN	80	3,208	3,558	3,504	2,715	3,241	3,551	3,509	3,564	3,907	3,522	3,797
8ARLEY	75	930	1,093	986	984	1,144	869	818	1,012	916	934	902
OATS	70	237	256	204	139	115	106	55	63	72	86	69
PULSES	180	61	72	86	75	100	108	82	127	114	115	80
POTATOES	40	2,558	2,366	2,656	1,630	1,882	2,026	1,650	1,485	2,433	1,507	1,280
SUGAR BEETS	15	2,209	2,679	3,370	2,356	2,653	3,434	3,554	3,452	3,570	3,356	3,358
TO8ACCO	656	30	22	18	17	19	27	29	18	20	22	22
HEMP	650	124	163	86	100	94	115	128	138	135	133	115
RAPESEEO	140	2	2	3	10	4	5	8	8	9	9	7
SUNFLOWER SEEO	140	102	115	68	105	131	126	114	75	102	79	90
OTHER OILSEEOS	140	12	14	14	16	13	14	6	11	14	15	13
VEGETA8LES	65	492	522	517	465	578	764	673	682	879	906	800
FRUIT	100	798	907	723	1,019	865	987	972	858	978	1,258	1,070
GRAPES	48	660	555	491	591	551	736	926	427	569	791	873
FLAX FI8ER	650	16	22	22	30	30	37	38	44	48	48	40
8EEF ANO VEAL	742	113	123	136	134	144	149	129	140	152	162	176
MUTTON ANO LAM8	971	8	9	10	13	14	13	10	13	15	15	18
PORK	680	245	280	254	279	291	289	290	320	314	307	328
POULTRY MEAT	833	122	127	107	115	122	131	143	144	150	164	166
OTHER MEAT	807	13	23	32	21	10	5	4	4	5	4	4
COW'S MILK	76	1,908	1,990	1,958	1,899	1,806	1,804	1,856	1,762	1,845	1,977	1,964
WOOL, GREASY 8ASIS	1,320	7	8	8	9	9	9	10	10	10	10	10
EGGS	707	95	103	103	106	102	105	123	133	135	153	156
AGGREGATES OF PROOUCTION		-MILLION OOLLARS AT CONSTANT PRICES-										
CROPS		970.6	1,058.2	963.8	898.6	956.5	994.2	1,028.1	1,038.5	1,117.5	1,135.1	1,112.1
LIVESTOCK		593.3	649.4	630.4	645.5	649.3	656.0	666.2	698.4	718.7	755.1	785.4
LIVESTOCK FEEO OEOUCTION	.50	-296.6	-324.7	-315.2	-322.7	-324.6	-328.0	-333.1	-349.2	-359.3	-377.5	-392.7
TOTAL AGRICULTURE		1,267.3	1,382.9	1,279.0	1,221.4	1,281.2	1,322.2	1,361.2	1,387.7	1,476.9	1,512.7	1,504.8
TOTAL FOOO		1,146.7	1,237.6	1,186.4	1,113.8	1,176.2	1,193.7	1,221.1	1,244.4	1,331.6	1,367.4	1,376.4
INOICES OF PROOUCTION		(1957-59 = 100)										
CROPS		100	109	99	93	99	102	106	107	115	117	115
TOTAL AGRICULTURE		100	109	101	96	101	104	107	110	117	119	119
TOTAL FOOO		100	108	103	97	103	104	106	109	116	119	120
PER CAPITA AGRICULTURE		100	108	100	95	99	102	104	107	114	115	114
PER CAPITA FOOO		100	107	102	96	101	102	103	106	113	115	115
INOEX OF POPULATION 1958 POPULATION= 9,882,000		100.0	100.6	101.0	101.5	101.8	102.1	102.4	102.7	103.0	103.5	104.1

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS	-1,000 METRIC TONS-									
WHEAT	93	2,375	1,888	1,863	2,013	1,870	2,002	2,134	2,121	2,319	2,321
RYE	86	7,626	6,488	6,148	6,173	4,853	5,844	7,003	6,558	7,437	7,329
CORN	80	30	4	26	34	36	31	123	90	38	34
BARLEY	75	1,160	1,081	1,009	1,176	1,134	1,086	1,239	1,131	1,227	1,210
OATS	70	2,565	2,127	1,981	2,348	2,169	2,073	2,287	2,259	2,541	2,670
OTHER GRAINS	70	487	450	378	413	435	420	508	447	518	517
PULSES	180	67	111	99	97	84	100	126	111	81	70
POTATOES	40	35,201	36,130	26,696	27,725	31,800	35,662	27,021	38,052	35,104	34,800
SUGAR BEETS	15	7,341	6,377	5,363	6,158	6,881	6,950	7,286	6,428	7,621	8,427
TOBACCO	656	44	28	31	28	31	35	46	34	52	37
HEMP	650	69	66	78	58	51	69	66	96	69	67
RAPESEED	140	104	101	120	88	79	100	152	80	101	80
OTHER OILSEEDS	140	60	77	0	0	0	0	92	91	75	50
VEGETABLES	65	2,652	1,972	1,655	2,020	2,320	2,163	2,321	2,512	2,665	2,816
FRUIT	100	542	224	442	190	412	356	304	547	328	847
FLAX FIBER	650	236	247	293	238	195	245	276	313	277	241
BEEF AND VEAL	742	299	220	199	203	215	201	224	253	250	310
MUTTON AND LAMB	971	29	5	10	11	12	14	23	26	28	28
PORK	680	1,208	958	849	776	866	878	966	1,085	1,218	1,264
POULTRY MEAT	833	52	33	36	44	48	48	46	47	49	51
OTHER MEAT	807	27	30	43	46	51	44	37	27	21	22
COW'S MILK	76	11,747	8,000	8,938	9,100	9,302	9,622	9,913	10,228	11,054	11,871
WOOL, GREASY BASIS	1,320	9	4	5	6	7	9	10	10	9	9
EGGS	707	263	191	203	214	222	230	234	239	244	256
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-									
CROPS		3,186.7	2,953.7	2,541.1	2,594.6	2,635.3	2,913.5	2,780.0	3,211.3	3,187.3	3,204.3
LIVESTOCK		2,227.1	1,619.5	1,628.8	1,613.6	1,714.5	1,741.0	1,845.6	1,971.2	2,123.1	2,272.1
LIVESTOCK FEED DEDUCTION	.52	-1,158.0	-842.1	-846.9	-839.0	-891.5	-905.3	-959.7	-1,025.0	-1,104.0	-1,181.4
TOTAL AGRICULTURE		4,255.8	3,731.1	3,323.0	3,369.2	3,458.3	3,749.2	3,665.9	4,157.5	4,206.4	4,295.0
TOTAL FOOD		4,016.7	3,503.9	3,054.9	3,150.5	3,268.8	3,510.1	3,400.2	3,856.1	3,935.4	4,058.5
INDICES OF PRODUCTION		(1957-59 = 100)									
CROPS		100	93	80	81	83	91	87	101	100	101
TOTAL AGRICULTURE		100	88	78	79	81	88	86	98	99	101
TOTAL FOOD		100	87	76	78	81	87	85	96	98	101
PER CAPITA AGRICULTURE		100	102	89	88	89	95	91	101	101	101
PER CAPITA FOOD		100	101	86	87	89	93	90	99	100	101
INDEX OF POPULATION 1958 POPULATION= 28,770,000		100.0	86.3	87.8	89.5	91.3	93.0	94.8	96.7	98.4	100.0

TABLE 11.--POLAND (CONTINUED)

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DOLLARS	-1,000 METRIC TONS-										
WHEAT	93	2,375	2,484	2,303	2,792	2,700	3,067	3,042	3,422	3,603	3,934	4,644
RYE	86	7,626	8,113	7,878	8,356	6,685	7,124	6,964	8,289	7,700	7,694	8,940
CORN	80	30	19	47	33	19	14	18	15	13	14	13
BARLEY	75	1,160	1,043	1,310	1,339	1,315	1,479	1,261	1,468	1,409	1,412	1,300
OATS	70	2,565	2,483	2,774	2,940	2,740	2,830	2,218	2,541	2,625	2,818	2,700
OTHER GRAINS	70	487	427	497	545	466	546	486	554	573	587	670
PULSES	180	67	51	53	52	62	71	78	111	117	96	125
POTATOES	40	35,201	35,698	37,855	45,203	37,817	44,868	47,860	43,263	46,144	48,620	50,505
SUGAR BEETS	15	7,341	5,975	10,262	11,555	10,075	10,661	12,574	12,314	13,620	15,521	14,700
TOBACCO	656	44	42	41	46	37	73	95	52	48	78	82
HEMP	650	69	71	82	92	89	78	92	117	122	137	130
RAPESEED	140	104	131	147	257	361	227	267	504	448	651	700
OTHER OILSEEDS	140	60	55	82	83	86	77	67	96	105	110	110
VEGETABLES	65	2,652	2,475	3,359	3,207	2,829	3,692	3,734	3,713	4,067	3,636	3,600
FRUIT	100	542	450	1,114	616	329	571	1,139	405	1,276	857	1,300
FLAX FIBER	650	236	191	258	324	391	310	278	340	332	425	450
BEEF AND VEAL	742	299	338	334	340	395	443	462	434	440	498	540
MUTTON AND LAMB	971	29	31	28	26	25	22	19	20	20	22	20
PORK	680	1,208	1,142	1,177	1,320	1,284	1,120	1,102	1,306	1,345	1,313	1,280
POULTRY MEAT	833	52	55	62	71	75	73	82	89	103	107	110
OTHER MEAT	807	27	37	46	44	39	34	38	33	36	34	36
COW'S MILK	76	11,747	12,315	12,499	12,874	12,873	12,653	12,604	13,344	14,235	14,494	14,589
WOOL, GREASY BASIS	1,320	9	9	9	9	8	7	7	8	8	9	9
EGGS	707	263	289	315	346	343	324	338	353	352	357	360
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		3,186.7	3,168.7	3,510.1	3,934.4	3,441.2	3,853.4	3,990.3	3,991.3	4,195.1	4,413.0	4,706.5
LIVESTOCK		2,227.1	2,285.3	2,348.6	2,504.6	2,515.9	2,399.8	2,415.7	2,604.5	2,716.8	2,766.0	2,786.4
LIVESTOCK FEED DEDUCTION	.52	-1,158.0	-1,188.3	-1,221.2	-1,302.3	-1,308.2	-1,247.8	-1,256.1	-1,354.3	-1,412.7	-1,438.3	-1,448.9
TOTAL AGRICULTURE		4,255.8	4,265.7	4,637.5	5,136.7	4,648.9	5,005.4	5,149.9	5,241.5	5,499.2	5,740.7	6,044.0
TOTAL FOOD		4,016.7	4,055.8	4,377.7	4,824.2	4,301.9	4,696.1	4,837.9	4,899.7	5,162.0	5,312.2	5,601.3
INDICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	99	110	123	108	121	125	125	132	138	148
TOTAL AGRICULTURE		100	100	109	121	109	118	121	123	129	135	142
TOTAL FOOD		100	101	109	120	107	117	120	122	129	132	139
PER CAPITA AGRICULTURE		100	98	106	116	103	111	112	112	117	122	127
PER CAPITA FOOD		100	99	106	115	101	110	111	111	117	119	124
INDEX OF POPULATION 1958 POPULATION= 28,770,000		100.0	101.6	102.7	104.2	105.4	106.7	108.3	109.5	110.2	111.0	111.9

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS	-1,000 METRIC TONS-									
WHEAT	93	3,538	2,219	3,521	2,975	3,964	2,140	3,006	2,436	3,701	2,914
RYE	86	135	182	229	211	262	170	214	136	152	124
RICE, PADDY	102	43	36	45	49	55	50	35	36	36	37
CORN	80	5,225	2,101	3,100	2,520	3,225	4,953	5,877	3,922	6,338	3,657
BARLEY	75	390	325	526	518	612	386	445	291	417	305
OATS	70	319	283	389	429	494	357	374	305	392	250
OTHER GRAINS	70	6	3	6	3	9	8	5	3	6	6
PULSES	180	144	113	177	151	171	152	267	135	147	129
POTATOES	40	2,911	1,601	2,141	2,257	2,355	2,397	2,608	2,675	3,058	2,777
SUGAR BEETS	15	2,407	633	1,430	890	1,300	1,408	2,000	1,519	2,043	1,732
TOBACCO	656	31	14	25	15	24	19	26	26	36	31
COTTON	274	6	27	67	35	89	79	20	19	13	3
HEMP	650	109	120	201	143	148	130	144	129	121	92
RAPESEED	140	6	1	6	7	11	8	10	8	6	6
SUNFLOWER SEED	140	357	214	230	215	324	282	278	223	255	286
OTHER OILSEEDS	140	59	24	38	38	51	34	38	48	66	48
VEGETABLES	65	1,574	1,126	1,530	1,541	1,788	1,521	1,571	1,064	1,460	1,354
FRUIT	100	893	401	276	422	780	496	977	556	551	959
GRAPES	47	1,008	648	651	742	688	774	1,110	578	882	1,169
FLAX FIBER	650	35	29	36	23	28	26	45	46	50	28
BEEF AND VEAL	742	175	144	160	168	144	157	169	175	161	179
MUTTON AND LAMB	971	58	56	59	63	57	51	51	44	56	59
PORK	680	242	159	163	172	185	228	298	242	231	232
POULTRY MEAT	833	52	30	39	32	32	35	40	47	49	55
MILK	76	2,347	1,931	1,905	1,967	1,854	2,047	2,204	2,019	2,147	2,354
WOOL, GREASY BASIS	1,320	20	16	16	17	19	19	21	20	19	20
EGGS	707	93	50	52	55	64	64	70	80	91	91
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-									
CROPS		1,407.6	822.9	1,190.8	1,042.5	1,315.4	1,179.7	1,457.3	1,080.3	1,482.1	1,164.6
LIVESTOCK		665.0	497.6	522.0	540.4	525.8	576.1	655.5	612.8	624.4	663.3
LIVESTOCK FEED DEDUCTION	.50	-332.5	-248.8	-261.0	-270.2	-262.9	-288.0	-327.7	-306.4	-312.2	-331.6
TOTAL AGRICULTURE		1,740.1	1,071.7	1,451.8	1,312.7	1,578.3	1,467.8	1,785.1	1,386.7	1,794.3	1,496.3
TOTAL FOOD		1,597.6	937.1	1,241.8	1,162.9	1,398.7	1,307.2	1,611.9	1,224.2	1,630.8	1,370.8
INDICES OF PRODUCTION						(1957-59 = 100)					
CROPS		100	58	85	74	93	84	104	77	105	83
TOTAL AGRICULTURE		100	62	83	75	91	84	103	80	103	86
TOTAL FOOD		100	59	78	73	88	82	101	77	102	86
PER CAPITA AGRICULTURE		100	69	91	81	97	89	107	82	104	86
PER CAPITA FOOD		100	65	85	79	94	87	105	79	103	86
INDEX OF POPULATION 1958 POPULATION= 18,056,000		99.9	90.3	91.2	92.1	93.3	94.4	96.0	97.4	98.7	100.0

TABLE 12--ROMANIA (CONTINUED)

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DOLLARS	-1,000 METRIC TONS-										
WHEAT	93	3,538	4,000	3,450	3,990	4,054	3,799	3,824	5,937	5,065	5,820	4,820
RYE	86	135	128	103	104	75	78	92	125	100	71	60
RICE, PADDY	102	43	55	49	31	20	51	54	46	56	70	56
CORN	80	5,225	5,680	5,531	5,740	4,932	6,023	6,692	5,877	8,022	6,858	6,780
BARLEY	75	390	449	405	468	419	351	348	485	483	531	425
OATS	70	319	315	284	275	167	124	79	124	170	170	125
OTHER GRAINS	70	6	5	4	4	10	10	10	7	3	4	2
PULSES	180	144	156	254	244	218	221	184	206	291	288	200
POTATOES	40	2,911	2,897	3,009	2,875	2,597	2,692	2,640	2,195	3,352	3,096	3,656
SUGAR BEETS	15	2,407	3,446	3,399	2,911	2,180	2,298	3,668	3,275	4,368	3,830	3,400
TOBACCO	656	31	26	16	18	26	40	42	34	40	41	35
COTTON	274	6	3	1	0	0	0	0	0	0	0	0
HEMP	650	109	114	105	89	68	66	74	72	91	91	78
RAPESEED	140	6	7	11	6	0	0	0	0	0	0	0
SUNFLOWER SEED	140	357	529	522	481	450	506	518	564	671	720	726
OTHER OILSEEDS	140	59	64	94	80	46	57	58	60	71	60	55
VEGETABLES	65	1,574	1,909	1,831	1,712	1,454	1,702	1,764	1,654	2,176	2,000	2,300
FRUIT	100	893	1,170	829	980	714	1,048	651	1,135	1,390	1,206	1,034
GRAPES	47	1,008	973	874	752	1,032	936	898	921	954	910	1,180
FLAX FIBER	650	35	28	42	38	61	54	42	53	77	76	58
BEEF AND VEAL	742	175	185	198	219	196	180	198	210	225	235	250
MUTTON AND LAMB	971	58	58	61	69	74	65	70	70	70	75	78
PORK	680	242	264	279	296	306	252	348	337	374	420	435
POULTRY MEAT	833	52	52	64	70	71	68	81	85	93	97	100
MILK	76	2,347	2,540	2,750	2,910	2,779	2,537	2,490	2,684	3,092	3,347	3,765
WOOL, GREASY BASIS	1,320	20	21	22	23	24	23	25	25	26	28	26
EGGS	707	93	98	107	118	117	103	112	120	128	132	138
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		1,407.6	1,576.0	1,482.2	1,518.0	1,384.5	1,507.1	1,536.0	1,712.7	1,991.9	1,926.3	1,804.7
LIVESTOCK		665.0	706.4	762.7	824.1	810.1	720.7	820.4	845.6	926.6	998.3	1,058.3
LIVESTOCK FEED DEDUCTION	.50	-332.5	-353.2	-381.3	-412.0	-405.0	-360.3	-410.2	-422.8	-463.3	-499.1	-529.1
TOTAL AGRICULTURE		1,740.1	1,929.2	1,863.6	1,930.1	1,789.6	1,867.5	1,946.2	2,135.5	2,455.2	2,425.5	2,333.9
TOTAL FOOD		1,597.6	1,791.3	1,728.2	1,805.3	1,656.9	1,732.9	1,810.2	1,998.9	2,285.4	2,253.0	2,188.2
INDICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	112	105	108	98	107	109	122	142	137	128
TOTAL AGRICULTURE		100	111	107	111	103	107	112	123	141	139	134
TOTAL FOOD		100	112	108	113	104	108	113	125	143	141	137
PER CAPITA AGRICULTURE		100	110	105	108	100	103	107	117	133	130	125
PER CAPITA FOOD		100	111	106	110	100	104	108	119	135	132	128
INDEX OF POPULATION 1958 POPULATION= 18,056,000		99.9	100.9	101.9	102.8	103.5	104.2	104.8	105.4	106.0	106.7	107.3

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS					-1,000 METRIC TONS-					
WHEAT	93	3,227	1,830	2,280	1,680	2,510	1,380	2,430	1,600	3,100	2,450
RYE	86	262	219	277	225	309	191	263	205	280	241
RICE, PADDY	102	22	6	7	8	16	26	26	21	22	22
CORN	80	5,427	2,090	4,040	1,470	3,840	3,000	3,900	3,370	5,660	3,950
BARLEY	75	550	266	359	258	458	253	390	344	604	470
OATS	70	382	195	293	216	352	233	278	324	484	259
OTHER GRAINS	70	44	15	17	21	34	24	44	39	45	41
PULSES	180	183	69	198	54	158	182	238	174	189	124
POTATOES	40	2,893	1,050	1,650	1,150	2,100	1,880	2,270	2,190	3,310	2,610
SUGAR BEETS	15	1,977	851	1,940	512	1,510	1,250	1,380	1,130	2,030	1,480
TOBACCO	656	49	16	28	15	31	32	43	31	63	39
COTTON	274	8	5	4	2	3	5	9	6	10	6
HEMP	650	272	175	204	120	220	272	342	220	312	262
RAPESEED	140	5	4	5	8	5	12	3	8	5	3
SUNFLOWER SEED	140	96	69	94	51	113	125	102	59	93	80
OTHER OILSEEDS	140	19	7	9	2	6	7	8	6	14	13
VEGETABLES	65	1,457	521	1,017	562	1,166	979	1,117	1,029	1,612	1,170
FRUIT	100	1,256	488	1,614	633	1,479	710	1,346	473	947	1,082
GRAPES	48	1,017	749	1,210	678	847	586	1,150	656	907	1,190
FLAX FIBER	650	23	12	17	10	18	14	22	18	22	20
BEEF AND VEAL	742	133	133	81	82	91	90	114	123	138	132
MUTTON AND LAMB	971	51	30	30	48	52	54	52	53	49	44
PORK	680	202	145	158	117	167	188	198	206	174	191
POULTRY MEAT	833	63	29	38	42	50	49	48	56	61	62
OTHER MEAT	807	34	22	17	14	18	20	21	24	27	34
MILK	76	2,441	1,649	1,675	1,509	1,748	1,753	1,918	2,086	2,380	2,416
WOOL, GREASY BASIS	1,320	14	15	16	15	16	17	16	15	14	14
EGGS	707	83	44	47	51	51	58	69	81	83	83
AGGREGATES OF PRODUCTION						-MILLION DOLLARS AT CONSTANT PRICES-					
CROPS		1,520.2	722.3	1,203.0	629.0	1,222.8	942.4	1,315.0	957.7	1,566.5	1,237.3
LIVESTOCK		628.2	444.6	423.6	403.9	477.8	500.5	542.3	584.5	599.0	610.3
LIVESTOCK FEED DEDUCTION	.50	-314.1	-222.3	-211.8	-201.9	-238.9	-250.2	-271.1	-292.2	-299.5	-305.1
TOTAL AGRICULTURE		1,834.3	944.6	1,414.8	831.0	1,461.7	1,192.7	1,586.2	1,250.0	1,866.0	1,542.5
TOTAL FOOD		1,589.9	791.3	1,230.5	716.4	1,264.8	962.0	1,297.8	1,053.6	1,586.4	1,313.5
INDICES OF PRODUCTION						(1957-59 = 100)					
CROPS		100	48	79	41	80	62	87	63	103	81
TOTAL AGRICULTURE		100	51	77	45	80	65	86	68	102	84
TOTAL FOOD		100	50	77	45	80	61	82	66	100	83
PER CAPITA AGRICULTURE		100	56	84	48	85	68	88	69	103	84
PER CAPITA FOOD		100	55	84	48	85	64	84	67	101	83
INDEX OF POPULATION											
1958 POPULATION= 18,018,000		100.1	90.7	92.1	93.2	94.6	95.9	97.2	98.2	99.1	100.0

TA8LE 13.--YUGOSLAVIA (CONTINUED)

PROOUCTION 8Y COMMOOITY, VALUE ANO INOICES OF TOTAL AGRICULTURAL ANO FOOO PROOUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMOOITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	OOLLARS	-1,000 METRIC TONS-										
WHEAT	93	3,227	4,130	3,570	3,170	3,510	4,140	3,700	3,460	4,600	4,820	4,360
RYE	86	262	265	233	191	169	156	175	156	176	171	140
RICE, PAOOY	102	22	21	22	19	23	23	25	25	23	20	20
CORN	80	5,427	6,670	6,160	4,550	5,270	5,380	6,960	5,920	7,980	7,200	6,810
8ARLEY	75	550	575	529	571	475	524	534	682	713	606	450
OATS	70	382	404	373	432	305	345	293	338	386	363	275
OTHER GRAINS	70	44	45	46	40	34	31	27	31	29	26	22
PULSES	180	183	237	227	193	190	219	245	182	229	213	190
POTATOES	40	2,893	2,760	3,270	2,690	2,630	3,020	2,820	2,380	3,230	2,800	2,920
SUGAR 8EETS	15	1,977	2,420	2,290	1,730	1,870	2,670	2,830	2,620	4,030	3,680	2,910
TO8ACCO	656	49	44	28	15	30	54	66	54	54	54	44
COTTON	274	8	9	7	6	6	9	7	6	6	10	12
HEMP	650	272	241	201	255	278	256	292	316	309	261	195
RAPESEEO	140	5	7	7	9	2	2	4	3	3	5	5
SUNFLOWER SEEO	140	96	114	98	117	161	231	260	265	282	250	309
OTHER OILSEEOS	140	19	30	38	19	15	13	15	15	17	16	16
VEGETA8LES	65	1,457	1,589	1,622	1,302	1,429	1,660	1,791	1,563	1,913	1,893	1,750
FRUIT	100	1,256	1,738	591	1,827	1,369	1,375	1,233	707	1,236	1,312	1,355
GRAPES	48	1,017	954	732	952	1,130	1,220	1,250	1,120	1,230	1,050	1,270
FLAX FI8ER	650	23	27	22	19	12	13	12	12	12	10	9
BEEF ANO VEAL	742	133	129	138	154	216	208	180	183	216	239	256
MUTTON ANO LAM8	971	51	60	59	46	54	45	42	44	46	50	50
PORK	680	202	242	291	275	239	246	314	395	287	309	320
POULTRY MEAT	833	63	65	68	67	66	67	73	80	88	95	90
OTHER MEAT	807	34	40	43	41	43	42	46	54	50	58	60
MILK	76	2,441	2,527	2,509	2,467	2,398	2,342	2,406	2,474	2,696	2,801	2,815
WOOL, GREASY BASIS	1,320	14	14	14	14	13	13	12	13	13	14	14
EGGS	707	83	84	84	80	78	90	95	96	110	117	124
AGGREGATES OF PROOUCTION		-MILLION OOLLARS AT CONSTANT PRICES-										
CROPS		1,520.2	1,756.4	1,507.0	1,444.2	1,510.4	1,648.3	1,762.1	1,571.7	1,991.9	1,876.0	1,735.0
LIVESTOCK		628.2	675.0	717.5	697.5	719.4	713.8	751.7	830.4	813.8	876.0	899.7
LIVESTOCK FEEO OEOUCTION	.50	-314.1	-337.5	-358.7	-348.7	-359.7	-356.9	-375.8	-415.2	-406.9	-438.0	-449.8
TOTAL AGRICULTURE		1,834.3	2,093.9	1,865.8	1,793.0	1,870.1	2,005.2	2,138.0	1,986.9	2,398.8	2,314.0	2,184.9
TOTAL FOOO		1,589.9	1,869.7	1,682.0	1,584.9	1,643.1	1,775.2	1,879.4	1,719.5	2,135.9	2,081.2	2,001.5
INOICES OF PROOUCTION		(1957-59 = 100)										
CROPS		100	116	99	95	99	108	116	103	131	123	114
TOTAL AGRICULTURE		100	114	102	98	102	109	117	108	131	126	119
TOTAL FOOO		100	118	106	100	103	112	118	108	134	131	126
PER CAPITA AGRICULTURE		100	113	100	95	98	103	109	100	120	114	106
PER CAPITA FOOO		100	117	104	97	98	106	110	100	122	118	113
INOEX OF POPULATION 1958 POPULATION= 18,018,000		100.1	101.1	102.1	103.3	104.5	105.8	107.0	108.3	109.5	110.7	111.7

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1950	1951	1952	1953	1954	1955	1956	1957	1958
	DOLLARS	-1,000 METRIC TONS-									
WHEAT 1/	93	54,691	27,800	28,985	38,783	36,800	36,400	42,100	53,900	49,750	62,606
RYE 1/	86	15,148	17,961	2/15,023	2/15,132	14,514	15,590	16,475	14,096	14,467	15,737
RICE, PADDY 1/	102	196	192	2/195	2/200	211	211	234	238	200	194
CORN 1/	80	5,773	6,644	2/4,826	2/5,715	3,697	3,699	10,850	9,860	4,620	8,255
BARLEY 1/	75	8,777	6,354	2/7,000	2/7,620	7,076	7,764	9,797	11,643	8,480	9,579
OATS 1/	70	11,816	13,000	2/12,120	2/13,063	10,074	10,799	11,827	12,800	11,500	13,063
OTHER GRAINS 1/	70	1,073	2,880	2/3,000	2/3,500	3,170	3,748	1,424	1,388	930	780
PULSES 1/	180	1,585	2,048	2/1,500	2/2,000	1,064	874	1,273	969	1,226	1,638
POTATOES 1/	40	78,270	79,751	52,879	62,270	65,315	67,519	64,576	86,414	79,032	77,874
SUGAR BEETS	15	46,002	20,819	23,633	22,207	23,173	19,844	31,049	32,488	39,672	54,392
TOBACCO	656	105	59	2/65	2/75	81	94	81	79	102	100
COTTON	274	4,411	3,539	3,727	3,780	3,853	4,200	3,881	4,332	4,211	4,340
SUNFLOWER SEED 1/	140	3,203	1,654	1,600	2,029	2,420	1,756	3,493	3,631	2,577	4,256
OTHER OILSEEDS 1/	140	535	444	2/400	2/450	442	227	382	376	348	482
VEGETABLES	65	14,810	9,344	8,836	9,773	11,389	11,918	14,100	14,298	14,766	14,865
FRUIT	100	2,783	2,097	2/2,000	2/2,100	2,172	2/2,300	2,616	2,220	2,019	3,112
GRAPES	48	1,623	753	2/850	2/950	1,036	2/1,100	1,174	1,220	1,400	1,734
TEA	1,380	132	85	2/95	2/100	110	115	121	110	112	138
FLAX FIBER	650	414	255	193	213	162	218	381	521	440	438
BEEF AND VEAL 3/	741	2,361	2,002	1,700	1,870	1,776	1,777	1,854	1,996	2,046	2,295
MUTTON AND LAMB 3/	971	731	552	400	560	571	567	661	663	622	720
PORK 3/	680	2,560	1,108	1,275	1,350	1,729	2,036	1,897	2,000	2,508	2,448
POULTRY MEAT	833	638	278	400	400	513	480	455	475	584	600
OTHER MEAT 3/	807	236	61	90	135	186	266	308	260	244	219
MILK 4/	76	54,278	35,311	36,154	35,702	36,475	38,197	42,579	46,655	51,465	54,567
WOOL, GREASY BASIS	1,320	322	180	192	219	235	230	256	261	289	322
EGGS	707	1,300	643	729	792	883	945	1,016	1,074	1,225	1,267
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-									
CROPS		16,108.2	12,578.8	11,141.6	12,899.8	12,371.2	12,692.6	14,472.5	16,523.0	15,043.9	17,522.9
LIVESTOCK		10,392.4	6,429.4	6,437.4	6,852.0	7,330.1	7,741.1	8,225.4	8,737.9	9,667.8	10,208.7
LIVESTOCK FEED DEDUCTION	.40	-4,156.9	-2,571.8	-2,575.0	-2,740.8	-2,932.0	-3,096.4	-3,290.1	-3,495.1	-3,867.1	-4,083.4
TOTAL AGRICULTURE		22,343.7	16,436.4	15,004.0	17,011.0	16,769.3	17,337.3	19,407.8	21,765.8	20,844.6	23,648.2
TOTAL FOOD		20,189.7	15,062.8	13,603.9	15,547.7	15,093.2	15,741.2	17,538.7	19,692.0	18,801.8	21,493.3
INDICES OF PRODUCTION		(1957-59 = 100)									
CROPS		100	78	69	80	77	79	90	103	93	109
TOTAL AGRICULTURE		100	74	67	76	75	78	87	97	93	106
TOTAL FOOD		100	75	67	77	75	78	87	98	93	106
PER CAPITA AGRICULTURE		100	85	76	84	82	84	92	100	95	106
PER CAPITA FOOD		100	86	76	85	82	84	92	101	95	106
INDEX OF POPULATION 1958 POPULATION=206,850,000		100.0	87.0	88.6	90.1	91.6	93.2	94.8	96.5	98.2	100.0

1/ USDA ESTIMATE OF USABLE CROP AFTER DEDUCTING EXCESS MOISTURE AND FOREIGN MATTER FROM OFFICIAL "BUNKER WEIGHT" FIGURES. 2/ ESTIMATED. DATA NOT REPORTED BY U.S.S.R. 3/ DEDUCTION MADE TO ELIMINATE FAT AND OFFALS FROM U.S.S.R. REPORTED PRODUCTION: BEEF AND VEAL 15%; PORK 25%; MUTTON, LAMB AND GOAT 20%; POULTRY MEAT 0; OTHER MEAT 10%. 4/ MILK OUTPUT REDUCED AFTER 1954 TO ELIMINATE THAT CONSUMED DIRECTLY BY CALVES.

TABLE 14.--U.S.S.R. (CONTINUED)

PRODUCTION BY COMMODITY, VALUE AND INDICES OF TOTAL AGRICULTURAL AND FOOD PRODUCTION, AVERAGE 1957-59, ANNUAL 1950-68

COMMODITY	PRICE WEIGHT	AVERAGE 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	PRELIM. 1968
	DOLLARS	-1,000 METRIC TONS-										
WHEAT	93	54,691	51,718	46,274	52,262	54,400	40,000	57,700	46,500	85,000	64,000	78,500
RYE	86	15,148	15,240	13,280	15,240	13,716	11,700	12,800	14,500	12,000	12,000	12,400
RICE, PADDY	102	196	193	171	225	243	342	423	513	639	810	950
CORN	80	5,773	4,445	7,620	12,700	9,800	8,500	9,200	6,400	6,800	8,000	7,600
BARLEY	75	8,777	8,273	11,430	13,279	15,674	16,400	23,800	19,000	24,000	20,700	22,400
OATS	70	11,816	10,886	10,886	8,709	5,600	3,700	3,900	4,600	7,500	9,600	9,700
OTHER GRAINS	70	1,073	1,510	3,490	3,380	3,380	2,110	3,780	2,830	3,632	3,954	4,350
PULSES	180	1,585	1,890	2,439	3,636	6,822	7,227	10,000	6,020	6,328	5,895	5,600
POTATOES	40	78,270	77,905	75,937	75,879	62,709	64,651	84,278	79,808	79,068	85,918	91,400
SUGAR BEETS	15	46,002	43,942	57,728	50,911	47,435	44,052	81,174	72,276	74,037	87,111	93,600
TOBACCO	656	105	112	103	100	102	122	184	169	178	215	200
COTTON	274	4,411	4,681	4,289	4,518	4,304	5,210	5,285	5,662	5,981	5,970	5,970
SUNFLOWER SEED	140	3,203	2,777	3,652	4,370	4,411	3,942	5,573	5,013	5,658	6,079	6,110
OTHER OILSEEDS	140	535	774	313	543	685	584	535	604	819	766	790
VEGETABLES	65	14,810	14,800	16,574	16,151	15,989	15,151	19,468	17,627	17,857	20,534	18,500
FRUIT	100	2,783	3,217	3,071	2,815	3,006	3,839	4,237	4,377	4,427	5,525	5,400
GRAPES	48	1,623	1,734	1,871	2,235	2,972	2,572	2,629	3,723	3,378	3,441	4,200
TEA	1,380	132	146	164	162	179	196	194	197	238	234	236
FLAX FIBER	650	414	364	425	399	432	380	346	480	461	485	500
BEEF AND VEAL	741	2,361	2,742	2,805	2,465	2,805	3,145	3,060	3,315	3,740	4,335	4,420
MUTTON AND LAMB	971	731	850	800	800	880	880	880	800	720	800	800
PORK	680	2,560	2,725	2,475	2,775	3,000	3,225	2,100	3,075	3,375	3,375	3,375
POULTRY MEAT	833	638	731	800	800	800	800	600	700	700	800	800
OTHER MEAT	807	236	246	262	279	279	274	174	238	190	107	93
MILK	76	54,278	56,802	56,163	56,308	57,537	55,123	56,938	65,307	68,393	71,928	73,900
WOOL, GREASY BASIS	1,320	322	356	357	366	371	373	341	357	371	394	413
EGGS	707	1,300	1,408	1,510	1,612	1,655	1,569	1,468	1,599	1,742	1,866	1,952
AGGREGATES OF PRODUCTION		-MILLION DOLLARS AT CONSTANT PRICES-										
CROPS		16,108.2	15,757.7	16,053.3	17,418.4	17,269.7	15,776.4	20,689.1	18,235.7	22,593.7	21,438.1	23,131.1
LIVESTOCK		10,392.4	11,300.0	11,223.3	11,284.2	11,897.2	12,056.4	11,005.5	12,664.4	13,421.0	14,342.6	14,630.2
LIVESTOCK FEED PRODUCTION	.40	-4,156.9	-4,520.0	-4,489.3	-4,513.6	-4,758.8	-4,822.5	-4,402.2	-5,065.7	-5,368.4	-5,737.0	-5,852.0
TOTAL AGRICULTURE		22,343.7	22,537.7	22,787.3	24,189.0	24,408.1	23,010.3	27,292.4	25,834.4	30,646.3	30,043.7	31,909.3
TOTAL FOOD		20,189.7	20,273.6	20,570.7	21,919.4	22,144.4	20,492.9	24,780.9	23,117.0	27,772.9	27,108.6	28,946.4
INDICES OF PRODUCTION		(1957-59 = 100)										
CROPS		100	98	100	108	107	98	128	113	140	133	144
TOTAL AGRICULTURE		100	101	102	108	109	103	122	116	137	134	143
TOTAL FOOD		100	100	102	109	110	102	123	114	138	134	143
PER CAPITA AGRICULTURE		100	99	98	102	102	95	111	104	121	118	124
PER CAPITA FOOD		100	98	98	103	103	94	112	102	122	118	124
INDEX OF POPULATION 1958 POPULATION=206,850,000		100.0	101.8	103.6	105.4	107.1	108.7	110.1	111.4	112.7	113.9	115.0

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SUMMARY OF

"LONG TERM PROJECTIONS OF AGRICULTURAL SUPPLY AND DEMAND, AUSTRALIA, 1965 and 1980"

U.S. DEPARTMENT OF AGRICULTURE Economic Research Service

UNITED STATES DEPARTMENT OF AGRICULTURE
STATISTICAL REPORTING SERVICE
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decrease. However, most of the decline appears to be in the cattle hides sector and may be related to a restocking of herds as a result of the high loss of cattle during the drought years of 1965/66 and 1967/68.

Analyses of the future potential for the development of cotton and tobacco were included as a portion of this study because of the importance of U.S. cotton and tobacco in agricultural trade with Australia.

Cotton - The median projection of production and import requirements for cotton during the 1970's excluded the possibility of the completion of the Ord development scheme, not authorized until 1967, for increased irrigation in Western Australia. Irrigated cotton had previously been established as the main crop of that area.

The upper range projection of cotton acreage and production did make allowances for increased irrigation of areas suitable for cotton production in both the Ord area and in parts of New South Wales. The preliminary figure for 1965 output of raw cotton indicated in the report fell short of the actual production for 1965/66 by about 4,000 metric tons. The 20,000 tons of raw cotton produced in 1965/66 is equivalent to the low projected figure for 1970. Cotton production at an average level of 69,000 tons is projected in the study for 1980. The 1967/68 cotton production was 32,000 metric tons or the median of raw cotton production projected for 1970. It is not unrealistic to assume that the upper limits of the projections of 45,000 and 68,000 metric tons for 1975 and 1980, respectively, may be attained, particularly since the Ord River scheme is now assured and production is also expanding in new areas of New South Wales and Queensland.

Tobacco - The lower range projection calculated for future domestic tobacco production and utilization is preferred. On this basis, the domestic crop would increase approximately one-fourth by 1970 and then level off to increases of about 3 percent a year during the mid-1970's and early 1980's. This projection assumes that future production will be of quality leaf and that a high percentage mixing regulation will be continued. Imports are expected to remain at about 13,000 metric tons into the 1970's and gradually decline to 11,000 tons by 1980.

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THE IMPACT OF NEW GRAIN VARIETIES IN ASIA

ERS-FOREIGN 275

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE
FOREIGN REGIONAL ANALYSIS DIVISION

PREFACE

This report on the impact of new varieties of grain in Asia was prepared by the Economic Research Service under an agreement with the Agency for International Development. It is part of a larger study on the outlook for demand of agricultural products produced by the less developed countries. An earlier version was presented at The Spring Review conference of the Agency for International Development, Washington, D.C., May 13-15, 1969. This report benefited from the many excellent studies prepared for that conference, as well as from discussions by the participants; but the analysis and conclusions contained herein are entirely the responsibility of the author.

This report estimates the contribution of the new varieties of rice and wheat to the production of grain in Asia in 1968-69. Since the estimate is necessarily rough, it is presented as a broad range of possibilities. The paper includes a discussion of various factors which may tend to slow the spread of the new varieties in Asia and also comments on some of the probable economic and social effects associated with these new varieties.

Special thanks are due Donald Chrisler and Dana G. Dalrymple who rendered invaluable service in many ways in preparing the report.

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July 1969

SUMMARY

In the last 2 years, the rapid spread of highly productive new varieties of rice and wheat in several less developed countries of Asia has increased the likelihood that these countries will improve the diets of their rapidly growing populations. These new varieties of grain, along with better weather, more fertilizer, higher prices to farmers, and other factors, have helped to bring about dramatic increases in grain production in India, Pakistan, and the Philippines.

The new wheat was developed in the late 1950's in Mexico. The rice varieties were developed in the early 1960's at the International Rice Research Institute in the Philippines. Both types of grains have short, stiff straw and produce much higher yields than traditional varieties without lodging. Their adaptability to wide differences in latitude has contributed to their rapid spread.

The new grains can make better use of larger amounts of fertilizer than traditional varieties, but their water requirements are high. The shortage of irrigation systems with adequate water supplies may be the most critical physical factor limiting the further spread of the new grain varieties.

The new seeds produce crops in shorter time periods than most traditional varieties, and thus sometimes make it possible to raise additional crops.

The new varieties have several disadvantages. Wet grain has been a problem, necessitating investment in artificial drying equipment in some instances. Moreover, since consumers rate the new grains rather low on palatability, they have been marketed at considerable discounts. Because of their rapid introduction, these grains may yet prove to be susceptible to native pests and diseases.

The rapid spread of the new varieties has generally been due to vigorous government programs. U.S. aid programs have assisted in a variety of ways. The swift adoption of these grains has clearly demonstrated that farmers in the less developed countries will readily accept new practices when the inputs are available and returns are substantial.

The improved wheat is used on almost all of Mexico's wheat areas. Both the new wheat and new rice varieties have spread rapidly in Asia. In 1968/69, they occupied about 7 percent of the riceland and about 16 percent of the wheatland in the less developed areas of Asia (excluding Communist China). It is estimated that, under average weather conditions, they would add about 9 percent to rice production and 20 percent to wheat production in the area, based on the judgment that their yields are from 30 to 100 percent greater than traditional varieties raised under similar irrigated conditions.

The future spread and production of the new varieties is uncertain. Factors which will influence their adoption include prices of grain and inputs, extension and improvement of irrigation systems, and damage from pests.

Farmers in a position to adopt the new varieties quickly can benefit substantially. Others may be harmed by the increased competition. The effects on farm labor are uncertain. In some situations the new grains may increase demand and thus (at least temporarily) bring about a rise in the wages of farm labor. On the other hand, the corresponding stimulus to mechanization may displace some labor.

The evaluation of the effects of the increased production on consumers requires judgments as to whether the increases will add to net supplies, replace food aid, displace commercial imports, or perhaps, to some extent, be exported. The actual situations will depend upon government decisions as well as market forces.

It seems possible that the less developed countries of Asia can become nearly self-sufficient in grain before many years. However, if supplies continue to grow faster than demand after self-sufficiency is attained, prices will be depressed, unless international markets can absorb additional increases. World supplies of grain have been growing relative to demand. The high producer prices which have been incentives to the rapid adoption of the new technology probably will be impossible to maintain. The poorer countries generally cannot afford to subsidize the production of grain, either to sell domestically at low prices or to export. Already some surpluses have arisen.

The longer run outlook for grain exporters does not appear promising. Surpluses of grain, or the capacity to produce surpluses, especially wheat, seem likely to grow. Government policies in both the developed and less developed countries, with respect to domestic agricultural programs, trade, and aid, will be vital in determining the economic framework in which further increases in production of grain will take place.

THE IMPACT OF NEW GRAIN VARIETIES IN ASIA

by

Joseph W. Willett 1/

THE SETTING

Less than 2 years ago, concern was expressed by a number of commentators that the world was losing the race between population and food production. The evidence usually cited was a comparison between ''recent trends'' in population and food production, shifts in patterns of grain trade, and a decline in surplus grain stocks, especially those held by the United States. There were even predictions of impending mass starvation.

These pessimistic views about the longrun outlook for food and agriculture were reinforced by shortrun developments. By 1966, world grain stocks were rapidly drawn down, mainly as a result of expanded imports by India and the Soviet Union. India had suffered two droughts in succession, and the Soviet Union had two crop failures in 3 years. Australia also had a poor crop. U.S. stocks were greatly reduced, the outlook for wheat yields was unfavorable, and the acreage allotment for the 1967 U.S. wheat crop was increased considerably.

As a result, the United States made considerable changes in its aid policy. In addition to lending support for population control, more emphasis was placed on agricultural development. Countries receiving assistance were strongly encouraged to place a higher priority on agricultural production.

This crisis atmosphere was an important factor in the rapid adoption of new varieties of grain in Asia. The governments of some Asian countries became especially concerned over their food problems, and the availability of highly productive grains seemed to offer a solution. In some instances, governments mounted high-priority programs to ensure that farmers would quickly adopt the new seed. These programs helped to make the essential inputs available to farmers to grow the new grains. The availability of the inputs together with the incentive of high grain prices quickly spread the new seed over substantial increages.

Apocalyptic predictions of food shortages are still being made, but in the past year and a half opinions have been expressed that the world food outlook has changed radically. Evidence cited to support this view includes falling grain prices, increased grain stocks, and the rapid spread of the new grains.

1/ Deputy Director, Foreign Regional Analysis Division, Economic Research Service.

Dramatic increases in production have occurred in India, Pakistan, and the Philippines. In these and several other of the less developed countries of Asia, new varieties of rice and wheat have become significant in a very short time.

For several reasons, it is not possible to estimate accurately either the actual impact of the new grains thus far or their potential. In most less developed countries, statistics on acreage, production, and yields of crops, including grain, are not reliable. The term ''new varieties'' is used to include varying groups of grains. The new grain varieties have not yet been widely tested in most countries, and little information on farm experience is available. In many of the less developed countries, the weather causes wide year-to-year variations in yield. These variations complicate the analytical problem of isolating the effects of the new varieties. Exceptionally high grain prices in recent years have also been influential in the generally enthusiastic reception given the new varieties.

HOW THE NEW VARIETIES WERE DEVELOPED

The new grain varieties which have received the most publicity in the last few years, and which are already making a substantial contribution to increased production in Asia, are the so-called ''Mexican'' wheats, and rice varieties developed and disseminated by the International Rice Research Institute (IRRI), especially those designated as IR-5 and IR-8. These grains were developed in a remarkably short time. However, the breeders of the new varieties had much firmly established earlier work on which to draw.

The Mexican Wheat Varieties

In the early 1940's, a program was initiated in Mexico which concentrated first on improving varieties and increasing production of corn and wheat and was later expanded to cover other commodities. Rust was a major factor limiting the yields of wheat in Mexico, and early breeding efforts were directed to developing resistant varieties (4, p. 3, 26, p. 239). 2/ Later, the breeders concentrated on producing wheat with short, stiff straw and a high response to fertilizer (26, p. 239).

Norin 10, a variety of wheat with short, stiff straw, which was first registered in 1935, was developed by the Japanese by crossing two U.S. varieties with several Japanese varieties. S. C. Salmon, who worked with the Japanese after World War II, brought Norin 10 to the United States where it was distributed to wheat breeders in 1947-48. Orville A. Vogel, a USDA scientist working in the State of Washington, used Norin 10 in developing Gaines wheat, a variety which has set world yield records in the northwest region of the United States. In 1953, Norman E. Bourlaug, a Rockefeller scientist working in Mexico, obtained some wheat varieties with short straw from Vogel. Norin 10 made a major contribution of germ plasm to the new Mexican wheats (26, pp. 236-238).

2/ Underscored numbers in parentheses refer to items in the Bibliography, page 24.

The IRRI Rice Varieties

The new varieties of rice are Indicas. The Indicas have long been predominant in tropical Asia, although their yields have been much lower than the Japonicas of Japan and Taiwan. Despite their higher yields, several characteristics of the Japonicas have prevented their spread into the tropical areas. They are more prone to disease than the native Indicas; they do not thresh well using the methods commonly employed in the Asian tropics; consumers generally do not care for their taste; and they lack a period of seed dormancy. The latter is especially important to prevent germination in areas where the harvest takes place during a rainy period (4, p. 17).

The International Rice Research Institute, which is supported by the Ford and Rockefeller Foundations, was dedicated in 1962 at Los Banos in the Philippines. During 1962, IRRI rice breeders made a number of crosses involving tall, tropical Indica varieties, the Ponlai Japonica variety from Taiwan, and several semidwarf Indica varieties from Taiwan. By 1965, IR-8 had been developed and given its first yield trial. IR-8 was obtained by crossing Peta, a tall rice from Indonesia, with Dee-geo-woo-gen, a short rice from China (8, pp. 252-253).

SOME CHARACTERISTICS OF THE NEW VARIETIES

Because of the genetic characteristics which have been bred into the new varieties of rice and wheat, these grains produce much higher yields than traditional varieties when conditions are favorable. The short, stiff stems are important in achieving increased productivity under heavy fertilization, because the plants do not lodge, or fall over, when heavy applications of fertilizer produce a heavy seed head. Grain which has lodged does not develop properly and is harder to harvest; photosynthesis is interfered with, yields are reduced, and growth of molds is stimulated. Generally, height is reduced when the growing period is shortened (4, p. 16). The new varieties accomplish far more photosynthesis then traditional varieties during the period when the grain is produced. Also, the ratio of grain to straw is greatly increased in comparison with older varieties.

In developing IR-8, thus far the most important of the new rice varieties, breeders reduced the height to 100 centimeters, compared with a height of perhaps 180 centimeters for traditional varieties. The short, upright leaves of IR-8 permit water to run off quickly and allow sunlight to penetrate to the lower leaves. The straw of the plant is not only reduced in length, but it is also exceptionally stiff because the breeders selected plants which had thick stems wrapped with leaf sheaves (8, pp. 254-255). Under some circumstances, the short, stiff stems of the new varieties may be a disadvantage. In East Pakistan, for example, plantings are made on land which is subject to uncontrolled flooding; the native varieties are better able to withstand such conditions.

The Mexican wheats and IR-8 have proved to be productive in areas with wide variations in the length of day. This adaptability has been important in their rapid spread to different latitudes (26, p. 239). The breeders have also incorporated into the new rice varieties the ability to produce many stems on a single plant, which lowers seed requirements (8, p. 252).

The new varieties of rice ripen in 120-125 days, rather than the 180 days required by most traditional varieties (30, p. 2). The shorter growing season increases the possibilities of producing more crops per year on the same land. However, a shorter growing period also sometimes brings the grains to maturity during the wet season. Thus, the customary method of spreading rice on the ground to dry may be inadequate and artificial drying may be required (6, p. 693).

The new rice varieties have some characteristics which make them relatively undesirable for processors and consumers. They do not mill as satisfactorily as older varieties, and consumers generally rate them lower on palatability. Although these disadvantages probably can be bred out, both the new rice and wheat varieties have often sold considerably below the prices of traditional grains (10, p. 44).

AREA PLANTED TO THE NEW VARIETIES

In some areas, the new grain varieties have spread with extraordinary rapidity. This rapid dissemination has been built on a well-established institutional base (as in India's Intensive Agricultural Districts Program), vigorous government action (as in Turkey), or both. Although the existence of an institutional base seems to have been important, many ad hoc arrangements have been employed. In some cases, institutions were used to perform jobs other than their traditional ones (27, p. 28). The availability of a combination or "package" of inputs at subsidized prices has greatly stimulated farmer acceptance of the programs. The rapid spread has clearly demonstrated that farmers in less developed countries will quickly and enthusiastically adopt new methods if the inputs are available and the benefits are substantial. AID's role in the programs has been substantial, but has varied according to circumstances in the individual countries.

The improved wheat varieties spread rapidly on the irrigated acreage of the wheat farmers of Mexico from 1949 to 1956. At present, the improved seed is used on nearly all of Mexico's wheat area, of which nearly 90 percent is irrigated and more than two-thirds is fertilized (11, p. 14).

The Mexican wheats were introduced into Pakistan and India in small quantities during 1963/64 and tests were conducted. In 1966, India made a large purchase of seed from Mexico for planting in the fall of that year. In 1967, Pakistan made an even larger purchase (7, p. 90).

Despite their rapid spread, the new varieties were not planted on a large enough share of the grain acreage in Asia in 1967/68 to have had a major impact on production in the less developed countries as a whole. They did affect production in certain regions and in certain countries, however. As indicated in table 1, less than 3 percent of the rice area in South and Southeast Asia was planted to new varieties in 1967/68. Wheat occupies a far smaller share of crop acreage than does rice in the less developed Asian countries, but about 11 percent of the wheat area in West and South Asia was planted to new varieties in 1967/68. The country-to-country variation in the rate of adoption is great. The share of the total wheat area seeded to new varieties in 1967/68 was insignificant in Turkey and Afghanistan but amounted to about 12 percent in Pakistan and nearly 20 percent in India.

Table 1.--Estimated area planted to new varieties of rice and wheat in West, South, and Southeast Asia, 1966/67-1968/69 1/

Country or region	Rice				Wheat			
	1966/67	1967/68	1968/69 2/		1966/67	1967/68	1968/69 2/	
	Million hectares							
Turkey						2/0.17 (8.1)	0.60	
Iran						(4.2)		
Afghanistan						.02 (2.3)		
Nepal					0.01	.02 (.1)		
West Pakistan			3/(1.4)	0.28	.11	.73 (6.0)	1.21	
East Pakistan		0.06	(9.9)	.08		2/ .01 (.1)	.02	
India	0.87	1.78	(36.7)	3.77	.52	2.94 (14.9)	4/4.05	
Burma			(5.2)	.22				
Thailand			(6.1)					
South Vietnam			(2.3)	.04				
Philippines	.07	.24	(3.0)	.45				
Indonesia			(7.4)	.38				
Total	.94	2.08	(72.0)	5.22	.64	3.89 (35.7)	5.88	
Other countries			(5.3)			(.6)		
Total rice area, South and Southeast Asia			(77.3)					
Total wheat area, West and South Asia						(36.3)		

1/ Adapted from Dalrymple, Dana G., Imports and Plantings of High-Yielding Varieties of Wheat and Rice in the Less Developed Nations (unpublished), U.S. Dept. Agr., IADS, Dec. 17, 1968.
2/ Target or projection.
3/ Figures in parentheses are total area.
4/ Given as 2.63 in India Program Memorandum, FY 1970, US/AID Mission, New Delhi, Sept. 1968, p. D-55.

In the 1968/69 crop season, about 5 million hectares were planted to the new rice varieties in South and Southeast Asia, or nearly 7 percent of the total riceland in the region. The new wheat varieties were scheduled for planting on 6 million hectares, or about 16 percent of the total wheat area in West and South Asia.

YIELDS AND PRODUCTION INCREASES

Yields

Reliable estimates of the impact of the new varieties on grain availability in Asia would require the comparison of yields of new and traditional varieties by region, while accounting for the influence of such factors as weather, acreage changes, fertilizer, prices, and availability of credit, irrigation, and extension services. The new varieties are generally produced under the best possible conditions. Therefore, it would be misleading to compare their yields with yields of traditional varieties grown under a variety of conditions and then assign all the differences to the genetic characteristics.

Following are some aspects of the problem of evaluating yields of the new grains:

(1) The new varieties were first planted on substantial acreages in Asia in 1967/68, a year of generally good weather in the region. In India and Pakistan, the large increases in area planted to new varieties in that year coincided with excellent weather, following 2 years of drought. It has been estimated that good weather contributed more than did the new varieties to India's increase in grain production in 1967/68 (33, p. D-20). During the 1967/68 wheat growing season in West Pakistan, average monthly rainfall was 135 percent above that of the previous two seasons (14). Turkey also experienced good weather in 1967/68 and correspondingly high yields.

(2) In 1967/68, the total acreages planted to both new and traditional varieties increased as follows: wheat in India, 10 percent; wheat in Pakistan, almost 10 percent (irrigated wheat acreage expanded 20 percent) (14); and rice in Pakistan, almost 10 percent. Rice acreage remained unchanged in India and, perhaps, in the Philippines. 3/ Turkey's wheat area did not change.

(3) There have been frequent references to planting the best land to new varieties. In Turkey, Mexican wheats were distributed in ''areas of low altitude and high rainfall'' (35, p. 5). In the Philippines, IR-8 was planted on the ''most productive rice growing area'' (28, p. 4). All of the new wheat varieties in Pakistan were planted on irrigated land. This apparently was also the case in India where the Mexican wheats are reported to have been cultivated by better-than-average farmers.

(4) Fertilizer consumption increased 50 percent in India and 30 percent in Pakistan in 1967/68. It is reasonable to assume that much of that increment was used on new varieties, but detailed information is not available.

3/ Estimates of 1967/68 Philippine rice acreage vary by 10 percent.

With adequate water, controlled irrigation, and other improved practices, the increased response of the new varieties to fertilizer can be substantial. The actual yield advantage will depend upon the level of fertilization, which, in turn, will depend upon the farmers' incentives to use fertilizer. The latter will be a function of the price of fertilizer and the price of grain. The yield advantages of the new varieties are generally greater at high levels of fertilizer use; when no fertilizer is used, they seem to have little if any advantage over traditional varieties. Thus, the yield advantages of the new varieties will be relevant only when the economic situation provides an incentive to use fertilizer. For example, one analysis has concluded that with the traditional wheat varieties used in India in 1963, fertilizer (with an ''optimum'' application of 58 kilograms per hectare) holds a promise of only a 50-percent yield increase. But Sonora Wheat 63 can use more fertilizer effectively and (with the application of 116 kilograms per hectare) will give a doubling of yields. Thus, it may be said that Sonora 63 has a 30-35 percent yield advantage over the traditional 1963 varieties (200 percent divided by 150 percent); however, Sonora required twice the dosage of fertilizer applied to the traditional varieties to achieve this yield (32, p. 695). Although there have been a few farm management studies of costs and returns, there is insufficient basis to generalize to aggregate supply functions which would predict the overall response of output to price changes (10, p. 45).

Yield experiences with the new grains have varied greatly, according to farmers' reports (18, p. 7). Numerous experiments and one farmer survey suggest that the new rice and wheat varieties have a yield advantage of 30-100 percent, when planted with adequate irrigation and a high level of fertilization and compared with traditional varieties grown under similar conditions. Data from these field trials are shown in table 2. The last item in each comparison is the traditional variety.

Production Increases

In 1968/69, the new rice varieties occupied about 7 percent (5.22 ÷ 77.3) of the total rice area in South and Southeast Asia (table 1). As shown in table 2, the yield advantage of the new varieties seems to fall within the wide range of 30-100 percent. However, this advantage is in relation to rice raised under some of the best conditions--better irrigation and farmer skills--of the region. Average rice yields in the region before the introduction of the new varieties were about 1.6 metric tons per hectare. Table 2 suggests that under some of the better conditions yields may have been double the average. Thus, 7 percent of the area may have already been producing 14 percent of the rice. A doubling of yields (100-percent yield advantage) by use of new varieties would add another 14 percent to the output. On the other hand, a 30-percent yield advantage would add only 4.2 percent (30 percent times 14 percent). An average of this range would be about 9 percent, a rough estimate of the contribution of the new varieties to rice production, under normal weather conditions, on the area planted to these varieties in 1968/69. This is not an estimate of a growth rate.

Wheat is not nearly as important as rice in the less developed Asian countries, but as shown in table 1, about 16 percent (5.88 ÷ 36.3) of the area was scheduled to be planted to new varieties of wheat in 1968/69. Wheat yields in the region averaged about 1 metric ton per hectare before the introduction of

Table 2.--Yield advantages of new varieties of rice and wheat, compared with traditional varieties, Asia, selected years

Variety	Yield per hectare	Remarks
Rice:	Metric tons	
Dwarf Indica	4.1	Both at 100 kilograms of nitrogen per hectare uniform variety trials, kharif, 1966, India (15, p. 8).
Local Indica	3.2	
IR-8	5.1	All at optimum marginal benefit-cost fertilizer application, experimental, wet season 1966 and 1967, IRRI, Los Banos, Philippines (5, p. 4).
IR-5	4.9	
Peta	2.7	
IR-8	6.2	Same conditions as above, Maligaya, Philippines (5, p. 4).
Peta	4.2	
IR-8	6.8	Same conditions as above except dry season, Maligaya, Philippines (5, p. 4).
IR-5	7.1	
Peta	4.0	
IR-8	n.a.	IR-8 showed 30 percent yield advantage over Peta (5, p. 11).
Peta	n.a.	
Wheat:		
Sonora 63	n.a.	Sonora 63 has a 30-35 percent yield advantage over local varieties, both at optimum levels of fertilization, based on experimental results in India (32, p. 695).
Local	n.a.	
Mexican	4.7	The 1966/67 crop in Ludhiana District, Punjab State, India. Mexican wheat was planted on only 11 percent of the wheat area in the district, probably by the best farmers on the best land (15, p. 9).
Indian	2.4	
Lerma Rojo Wheat 64 A	3.7-5.0	Tests and demonstrations, 1966/67-1967/68, India (3, p. 121).
Local	1.9-2.5	
Semi-dwarf	2.8	Both varieties grown on same farm, India (18).
Local	1.6	
"New"	1.8	Both irrigated, West Pakistan (18).
Local	1.0	

n.a. - not available

the new varieties. Again, table 2 suggests that yields under better conditions may have been twice that amount. Using the procedure followed above for rice, it can be roughly estimated that the new varieties would add from about 9.6 to 32 percent to normal wheat production in the region in 1968/69. The average of this range is about 20 percent.

This paper includes no forecast of future increases in production from the new varieties. Unless irrigation systems are extended, plantings will tend to be limited to the areas now adequately irrigated. Expansion on poorer land will tend to lower yields, but experience and adaptive research should help to overcome this problem. Farmer prices for grains, for competing products, and for inputs will affect both acreage and yields, but there is little information available on these factors for making estimates.

MULTIPLE CROPPING

The above estimates do not include the contribution from multiple cropping. An important characteristic of the new varieties is their shorter growing period and consequent potential for multiple cropping. However, even with good irrigation systems, multiple cropping requires a high level of managerial skill to coordinate a series of complex activities; hence, it is unlikely that it will spread quickly to areas where it is not already practiced. 4/ Multiple cropping may also create new problems. For example, in Thailand, in an area where year-round cropping has expanded, ''the presence of lush young plants throughout the year has not permitted the normal insect depletion common when the land was barren six months annually.'' This contributed to the spread of insect-borne disease (13). According to a recent survey, the potential land for double cropping of rice under existing irrigation is less than 10 percent of the total rice area in South and Southeast Asia, where the present double-cropped area amounts to 5 percent of the land in rice (3, p. 65). As irrigation systems are improved and extended and farmers gain experience, the area that is double cropped should be expanded.

In India, about 13 percent (18.6 million hectares) of the net area sown to all crops (138 million hectares) was double cropped in 1967/68. However, the bulk of the double-cropped area (12.5 million hectares) is unirrigated and thus unsuitable for high-yielding grain varieties. By 1969/70, it is expected that the irrigated double-cropped area will increase by only about 2 million hectares --less than 2 percent of the new sown area (33, p. D-5, D-23).

4/ Malaysia, a small producer of rice, seems to be an exception. Less than 5 years ago, an insignificant area was double cropped in Malaysia. In the 1968/69 season, 85,000 hectares were planted with a second crop of rice, compared with 40,000 hectares 2 years before. The area single cropped to rice amounts to about 325,000 hectares. Thus, more than 20 percent of the rice area is now double cropped (12).

LIMITATIONS TO SPREAD IN INDIVIDUAL COUNTRIES

Irrigation

A shortage of good irrigation systems appears to be the most important input limitation to the spread of the new varieties. Unless water can be carefully controlled, the advantage of the new varieties decreases rapidly. Many of the irrigation systems in South and Southeast Asia are not suitable for full realization of the potential of the new varieties. In many existing systems, the water flows by gravity from one field to the next, and fertilizer and plant protection chemicals are carried off in the water. Also, it is sometimes not possible to let the upper fields dry out in time for the harvest of the new varieties and thus the problem of wet grain at harvest is accentuated.

In much of Southeast Asia, the broad valleys will require large dams and long irrigation canals if additional irrigation systems are to be built (16, p. 339). Such systems cannot be built by local enterprise alone. Government action may be required to supply the initative, capital, and expertise, and new forms of cooperative organizations may be necessary to coordinate the use of the water.

In India and Pakistan, irrigation by pumps has grown rapidly. In West Pakistan, nearly 32,000 tube wells were installed by private enterprise in 5 years (3, p. 617). In many areas of Asia, there probably are large underground water resources which could be developed effectively. However, surveys and careful attention to water management will be necessary (3, p. 638).

As shown in table 3, only about 8 percent of India's grain area was planned to be under high-yielding varieties in 1968/69; therefore, it would seem that there is ample room for expansion. However, the 9.1 million hectares planned for high-yielding varieties represents 27 percent of the total irrigated grain area and a much higher, although undetermined, percentage of the land with reliable water control during the dry season. The data shown in table 3 support the view that inadequacy of irrigation is limiting the spread of the new grain varieties in India; the last column shows an almost equal increment in the planned acreage under high-yielding varieties and the planned increases in irrigated grain acreage. The irrigated area projected for traditional varieties remains very large and virtually stable. This suggests that water control on this area is not sufficiently reliable to risk the high costs of the fertilizer and insecticides required by the new varieties. No shortage of seed of the new varieties or of fertilizer is expected. In fact, some of the fertilizer available for 1969/70 will probably be used on traditional varieties.

West Pakistan has a good environment for the new wheat varieties--adequate irrigation, low rainfall, abundant sunshine, and few insects (5, p. 34). Long-standing problems of poor drainage and salinity are now being attacked. About 20 percent of West Pakistan's wheatland was planted to new varieties in the fall of 1968.

The potential for new varieties of rice in Pakistan is far more limited than for wheat. In East Pakistan, where 90 percent of Pakistan's rice is grown, the regular uncontrolled flooding of most of the producing areas lessens the value of the new short-stemmed varieties in the main spring and summer seasons

Table 3.--Grain production and inputs in India, 1967/68, and projections to 1968/69-1969/70

Item	Unit	1967/68	Projected 1968/69	Projected 1969/70	Change 1967/68-1969/70
Grain production	Million tons	1/ 100	98	103	2/ +10
Total grain area	Million ha.	1/ 121	119	119	2/ + 1
Irrigated grain area	do.	31.0	33.3	35.8	+ 4.8
High-yielding varieties of grain on irrigated land	do.	6.5	3/ 9.1	3/ 10.9	+ 4.4
Traditional varieties of grain on irrigated land	do.	24.5	24.2	24.9	+ 0.4
Fertilizer applied to grain 4/	Million nutrient tons	1.18	5/ 1.53	5/ 1.90	+ .72

1/ ''Normal weather'' estimate is 93.1 million tons and 118 million hectares.
2/ Relative to ''normal weather'' estimate.
3/ Plan of the Indian Government.
4/ Fertilizer applied to both high-yielding and traditional grain varieties.
5/ Requirements.

Source: (33, pp. D-4, D-16, D-17, D-20, D-22, D-24, D-26, D-55, E-1.)

11, p. 19). In addition, insect and disease problems complicate the growing of ew varieties in East Pakistan. West Pakistan, which has better growing con- itions, produces basmati rice, an extra-long-grain variety. A significant hare of this rice is exported at premium prices, and the government has in- reased the minimum purchase price to deter basmati producers from shifting to ther varieties (25, p. 5). However, exports of basmati rice have declined apidly in recent years.

The main obstacles to a rapid increase in the production of high-yielding ice in the Philippines appear to be the lack of good irrigation, a shortage of ice-drying facilities, and problems of consumer acceptability. The new arieties mature early during the latter part of the wet season. In 1967/68, ecause of a shortage of drying facilities, many farmers had to sell the new ype rice wet in the fields at a 20-percent discount (4, p. 31).

Lack of water control and the inferior quality of the new rice varieties relative to export grades are deterrents to their spread in Thailand and Burma. A shortage of fertilizer at the farm level is a handicap in Burma and Indonesia (4, p. 31).

In Turkey, Mexican wheats seem to be adapted to the warmer coastal areas. The Turkish program for the expansion of acreage in these wheats developed very rapidly with little preparation (2, p. 19). In 1968/69, Mexican wheats were planted on about 7 percent of the total wheatland. It is likely that within a few years the Mexican seed will be grown on much of the southern and western coastal wheatlands, or on about 15 percent of Turkey's total wheat acreage.

New dryland wheat varieties may hold promise for increased yields in Turkey. Varieties are available which, under the proper conditions, greatly increase production without the necessity of irrigation. However, efficient dryland wheat farming is complicated and requires mechanization for proper tillage. The stubble-mulch system, which has been developed in the U.S. Great Plains, requires heavy equipment for subsurface plowing and deep planting. Introduction of such methods in areas of peasant farming will require the development of institutions to obtain and coordinate the use of heavy equipment.

Risks of Diseases and Pests

The new varieties of wheat and rice are exotic to most of the regions where they are being introduced and may become susceptible to local diseases and insect damage. In some countries, little adaptive research and testing was done before the new varieties were introduced. It is possible that micro-organisms that were previously unimportant will become major causes of disease as field micro-climates are altered by heavy fertilization and the denser plant population of the new varieties. In the past, the use of locally produced seed of many strains provided some protection against the spread of diseases, since some of the various strains were resistant. The rapid introduction of a single variety on large contiguous areas increases the danger of epidemics (34, p. 468). Plant protection services, which require a high level of technical skill, are primitive in many of the less developed countries. Some problems with diseases and pests have already arisen. In India, the new rice varieties, which have spread much slower than the new wheats, have nonetheless been troubled more by insects and disease (1, rice, pp. 26-31; wheat, p. 26).

Prices and Incentives

The new varieties of rice sell at substantially lower prices than the traditional ones, since consumers generally do not rate them very highly (10, p. 43). The new rice generally is also considered inferior in milling qualities (9, pp. 7, 36). These characteristics, however, may be bred out in a few more years (4, p. 31). As indicated earlier, wet grain may often be a problem with the new rice varieties, but this disadvantage can presumably be overcome with investment in driers. Facilities for storage, processing, and transportation will be taxed as output increases. However, the private trade probably has considerable capacity for expansion to handle the increased production of grain (20, pp. vi, 22, 23).

The new varieties are exceptionally productive only when combined with fertilizer and pesticides, which the farmers must purchase. Thus, farmers using these inputs will of necessity be integrated into the markets; when prices for grain decline, they will tend to buy less fertilizer and pesticides. Of course, the prices of inputs are important, and recently the cost of fertilizer has declined. In the poorer countries, the demand for food grains generally is more elastic than it is in the richer countries, and thus substantial increases in production may be absorbed with relatively small price declines, if the problems of distribution are solved (20, p. 37). However, as the immediate food crisis abates, pressure for government investment in marketing facilities as well as in new irrigation may lessen.

In some cases, the margin of price over cost seems to be so large that considerable price declines could be absorbed without forcing farmers out of production and perhaps without even requiring much cutback in fertilization. Lower wheat prices in India do not seem to have slowed the spread of the new varieties (20, p. 54). However, these effects will depend on the alternatives available to farmers. Some will undoubtedly shift from grain to the production of other products if grain prices decline. In the Philippines, after the price of IR-8 fell, some farmers shifted to Malagkit, a high-priced rice used for cakes and pastries.

There is a rapidly growing demand for fruits, vegetables, and livestock products in the poorer countries. A recent study of the outlook for farm commodities in India projects that demand for milk and milk products will grow faster than supply during the next decade (21, tables 37-39). It is likely that some farmers located close to rapidly growing cities will shift to the production of fresh fruits and vegetables as grain prices decline. If grain prices decline sufficiently, more low quality rice and wheat probably will be fed to livestock. Such changes would be facilitated by research and investment to make inputs more productive in raising fruits and vegetables and in feeding livestock (20, p. 39).

THE BENEFICIARIES—THE PEOPLE LEFT BEHIND

Technological Innovations

The development of more productive varieties of grain is a technological change which lowers the unit costs of production and increases supplies available to consumers. In economic terminology, the new varieties cause a shift in the supply function; that is, at each price a greater amount of grain can be profitably produced and offered for sale than formerly. Technological innovations are among the main factors in economic development, and are important reasons why Malthus' predictions about population have not, and probably never will, come true. On the other hand, technological developments are not magic, and while solving some problems or providing opportunities to solve them, they often create other major economic, social, and political problems of adjustment (31, pp. 7-87; 34, p. 475).

Technological developments affect both outputs and inputs. The effects on outputs are usually desirable; the production of increased amounts of socially desirable goods and the reduction in costs give rise to the possibilities of increased welfare and a lower cost of living. To a large extent the benefits of technological development in agriculture are soon widely distributed among consumers, at least among those consumers who have the purchasing power and the opportunity to take advantage of lower market prices. Lower costs of living may be reflected in lower labor costs and thus have pervasive effects on overall economic development (19, pp. 95, 96). The increased production also may substitute for costly imports. However, in evaluating the effects of the new grain varieties in the poorer countries, even these conclusions must be qualified. A judgment must be made whether the increased output can be expected to result in increased total supplies to consumers or whether it may to a considerable extent displace grain obtained cheaply under concessional arrangements. In some countries grain prices have been high and subsidies substantial, a condition which may have stimulated some high-cost, uneconomic production (20, pp. 55, 56).

The People Left Behind

Not all the effects of technological changes on inputs may be desirable. The owners of some inputs will find that the demand for their services is lessened, at least in their present uses.

The development of the new grain varieties implies a shift in the comparative advantage among areas producing grain. The irrigated areas most suitable for these new varieties gain an advantage relative to other grain-producing areas, and the owners of suitable resources will be benefited. To a considerable extent, unless taxed away, the benefits of these developments will go to owners of irrigated land. Those farmers who are early users of the new process will tend to benefit from increased production and extra income until competition lowers profits. Thus, those farmers who are in a position (because of irrigation, location, credit availabilities, knowledge, etc.) to take advantage of the new opportunities may do very well.

Those farmers who are not in such an advantageous position will find that the increased competition reduces their market opportunities and thus causes them additional difficulties. Opportunities for some of these farmers might be found by research directed at increasing the productivity of labor in dairying and in growing fruits and vegetables (20, p. vi). Policies to improve the operation of the labor market and increase the demand for agricultural labor should have high priority. It is almost universally true in the less developed countries that the nonfarm sector is not growing rapidly enough to absorb a large influx of displaced farm labor. In most of these countries, the labor force in agriculture will continue to increase for some decades. Thus, a strategy for agricultural development which will promote labor-absorbing activities will be important. It has been suggested that the labor-using, capital-saving approach to agricultural development followed in Japan and Taiwan provides a model which should be studied in relation to the "seed-fertilizer revolution" (17, p. 2).

The tendency for certain groups to be especially benefited may be accentuated in the adoption of new varieties in some countries because resources are concentrated in subsidized ''packages'' under government programs. There has been a tendency to make the packages available to those regions or farmers where the production response is likely to be greatest. Because of the complementarity between the various inputs required (seeds, chemicals, equipment, credit, information, storage, and processing), the ''package'' approach has been helpful in the rapid spread of the new varieties. However, these programs have been so profitable for the adopting farmers that some of the subsidies used may have been unnecessary. Even in cases where subsidies helped to obtain rapid initial adoption, they will be less necessary as farmers become aware of the potential of the new seed combined with fertilizer. Pakistan, for example, has reduced its fertilizer subsidy (20, p. 56).

In some areas, the success with the new grain varieties has already stimulated considerable investment in machinery, but a lack of machinery, especially drills, threshers, and land leveling equipment has held down yields (18, pp. 13, 14).

Many of the developed countries now have serious social and economic problems arising from the displacement of farm people by technological developments. However, the developed countries have had rapid growth in their nonfarm sectors to absorb most of such people and have been able to afford high welfare costs for some of the others. The developed countries have also had relatively good labor markets and high levels of education which tend to make labor transferable.

The implications of the above arguments are not that technological development is undesirable. Technological changes are inevitable and essential for economic development. However, a few, very limited technological changes cannot be expected by themselves to give a great impetus to economic development. On the other hand, a particular technological change may generate considerable social dislocation and even discord (22, p. 12). The poorer countries do not have all the options open to the developed countries in solving the problems caused by the uneven impact of technological changes. To ignore the existence of these problems might be disastrous. Therefore, it is imperative that close study be given to all alternatives. Research to evaluate these problems and develop policies to solve them should have a high priority.

THE OUTLOOK FOR WORLD SUPPLY AND DEMAND

Demand—Self-Sufficiency

Several recent studies suggest that production of food grains in some countries considered in this report may increase at a rate of 4 to 6 percent a year (11, pp. 19, 27-28; 15, p. 13). On the other hand, it is unlikely that effective economic demand for grain in any of these countries will increase faster than 4 percent a year (less than 3 percent for population growth and perhaps 1 percent from rising per capita income), unless the livestock industry can be developed fast enough to use substantial amounts for feed. Countries now importing grain may use increased domestic production to replace imports. As a precentage of total consumption, imports of grain in most less developed countries are relatively small. Thus, the growth of production at a faster rate

than demand could soon eliminate the need for imports. It seems possible that the less developed countries of Asia can generally become self-sufficient in grain before many years, although imports may continue to supply some large coastal cities. Turkey and the Philippines are nearly self-sufficient in food grains. Both Pakistan and India plan to be self-sufficient within a few years.

Self-sufficiency is not necessarily a wise economic goal, however. To the extent that imports of grain are paid for with scarce foreign exchange, the concern for self-sufficiency is understandable. Of course, most of the imports of grain by these countries have been made as food aid with large price discounts. Still, there may be a desire to be free from the uncertainty and restrictions of large imports of food aid. The tightening of the conditions under which U.S. food aid is given undoubtedly reinforces this desire.

As indicated earlier, the demand for grains in the poorer countries probably is elastic enough so that prices need not decline greatly to bring substantial increases in consumption. It has been suggested that, because of the interrelations between agricultural output, income, and demand, ''. . . in early stages of development, increasing agricultural production will not have a strong effect upon prices'' (19, p. 76). However, this conclusion may not be correct in the case of large increases of production in concentrated areas and in poorly organized markets; a description which fits many of the situations wherein the increases of the new varieties have occurred. Despite surpluses of grain in West Pakistan, limited transportation and handling facilities restricted that country's ability to supply East Pakistan in the spring of 1969. In any case, after reaching self-sufficiency, if supplies of grain grow faster than domestic demand, prices will be depressed to some degree, unless the international market can absorb additional increases.

Shortrun Outlook for Grain Exports of the Less Developed Countries

Current world supplies of grain are large relative to demand. In the shortrun, this relationship probably will continue, barring widespread drought or radical changes in policy. In many countries, producer prices are well above export prices; the developed countries in this category are moving grain in world trade with the aid of subsidies. It is unlikely that the less developed countries of Asia will be able to afford to enter into large-scale competition in this market.

At present, Thailand stands almost alone among less developed Asian countries as a major world exporter of grain. The bulk of Thailand's grain is produced at relatively low cost with modest cash inputs and, consequently, is exported without subsidy. On the other hand, several Asian countries producing the new grain varieties have already encountered problems disposing of surpluses. High producer prices have been incentives to the adoption of the new grain technology. An alternative to disincentive prices would be to keep producer prices relatively high and subsidize exports. But the gap between producer and export prices in many Asian countries is wide, and large outlays might be required.

Here, the experience in Mexico may be relevant. Mexico pioneered in adoption of the wheat varieties now being introduced in Asia. In 1963/64, when Mexico became a substantial net exporter of wheat, world wheat prices were at a

peak because of the short crop in the USSR. The f.o.b. export price of Mexican wheat was only about 5 percent below the Mexican producer price. In subsequent years, however, the gap widened substantially as export prices fell and Mexico was burdened with a large export subsidy. Since 1966, the Mexican Government has altered its price policy to favor a shift in acreage from surplus wheat to those crops in short supply (such as sorghum and oilseeds). However, the 1966 reduction in wheat support was not sufficient to bring domestic prices down to export price levels.

The Longer Run Outlook for International Grain Markets

The high prices which held in the international rice market in 1967-68 may well be things of the past, and it seems likely that actual surpluses of wheat, or the capacity to produce surplus wheat, will be bearing down on prices for some time to come. In world markets, prices of food grains have tended to be higher than those for feed grains, partly because of government programs specifically designed to benefit food grains. Increased supplies of food grains coming from the new developments will increase the pressure on prices of food grains relative to feed grains.

Even for rice and feed grains, the surplus problem, although less acute than for wheat, may also grow. Thus, market pressures will tend to depress the prices of grains (especially wheat) from recent levels unless offset by government actions. The actual balancing of supply and demand may be made by various combinations of government programs and market forces.

A major difficulty in forecasting future world grain markets is that the policies of governments affect the world grain economy in many and complex ways through price support programs, subsidies, taxes, trade agreements, and food aid. Such government policies have a profound effect on production, utilization, and trade in grains. Although theoretically the effects of changing policies may be analyzed by economic models, the changes in policies themselves cannot be predicted by economic analysis. The economist must rely on ''assumptions,'' which often are of doubtful validity. Since the United States is the world's leading producer and exporter of grain and the largest donor of food aid and other assistance, its policy decisions are of primary importance in determining how world grain trade will actually develop.

During the next decade, assuming general political stability, standards of living and consumption of grain probably will rise throughout the world. In the less developed countries, the per capita growth of consumption in general, and of grains in particular, will be slow. But there is little evidence to support the view that in this period, discounting possible natural disasters, the world food situation will tend to worsen. On the other hand, there will still be many undernourished people in the world, people who are too poor to pay for adequate nutrition.

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THIRD CONSECUTIVE YEAR OF HIGH AGRICULTURAL OUTPUT EXPECTED

Agricultural production in Western Europe this year is likely to approxiate the 1968 record. As of early July, crop production is expected to be omewhat lower than last year's level but livestock and poultry output will robably increase slightly.

Weather conditions during the 1969 crop season so far have not been as ood as those that favored the bumper crops of 1968. Grain output probably ill not equal the 1968 crop; the outlook is that small declines for wheat, ye, barley, and oats should more than offset the sizable increase in the corn arvest. Despite a smaller wheat crop, the surplus problem will remain acute, articularly in the European Community (EC). Another large sugarbeet crop is n prospect, while some further decline in potato production seems likely.

The livestock situation in Western Europe indicates restrained growth in S. exports of feedstuffs. West European beef production is apparently enterng a cyclical downturn, and pork output probably will be below the 1968 level. educed foreign markets and growing self-sufficiency in many countries have reulted in slower growth in output of poultry meat and eggs. Dairy output is ikely to gain moderately because of increasing productivity per cow, and dairy arpluses will become more troublesome.

Crops: Total grain production in Western Europe in 1969 is expected to ill somewhat short of last year's record 120 million tons. 1/ The EC will ontribute to this decline. However, the most marked changes between the 1968 nd 1969 grain harvests are in prospect in some of the smaller producing counries. The Scandinavian countries and Portugal are not expected to equal their

1/ Metric tons are used throughout this report.

ST 1969

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excellent harvests of 1968 while Greece should have a much larger grain crop than the small harvest last year.

Weather caused some shifts in area among the grains. Wet weather delayed fall seeding in some countries, particularly the United Kingdom and France, and the spring of 1969 was cool and rainy throughout most of Western Europe. As a result, the area sown to wheat was reduced and the area planted to barley and corn expanded.

A somewhat smaller wheat crop would be of some help in alleviating the wheat surplus problem. The expected decrease in production of wheat in 1969 is due not only to a somewhat smaller area and less favorable weather but also to price policies designed to make feed grain production more profitable relative to wheat and thus prevent stocks (mainly wheat) from accumulating further, particularly in the EC and Spain. Nevertheless, the 1969 wheat crop will be well above the level necessary to solve the surplus and storage problems. Record grain crops were harvested in 1967 and 1968 and wheat stocks in some West European countries are excessive. The European Commission estimates that carryover stocks of wheat on August 1, 1969, totaled 5.3 million tons, or 3 million more than in a normal year. In France, the main surplus producer in the EC, the wheat area in 1969--primarily soft wheat--is down by only 3 percent and another relatively large harvest is in prospect.

France has attempted to relieve its surplus wheat situation through various commercial and food-aid export arrangements. By mid-1969, major grain sales to non-EC countries had been made to Mainland China (about 800,000 tons), the United Arab Republic (around 400,000 tons), Tunisia, and the Republic of China.

Also, weakness of the French franc resulted in large sales of French grain (mainly wheat) to West Germany and other EC members. West German millers were able to purchase French grain at low prices and offer domestic grain for sale to the Bonn Government at the higher intervention price; these imports aggravated a grain storage problem that was already acute in West Germany.

Excess supplies of French soft wheat contributed to the decision of the EC ministers to raise corn and barley prices relative to wheat in recent years as well as for the 1969/70 crop. This should encourage continuation of the shift in area from wheat to nonsurplus crops.

Wheat production is also forecast to decline in two other major producing countries and gain in at least one. Spain should have a smaller harvest than the good 1968 crop because of a reduction in area. The U.K.'s reduced crop is largely the result of a decrease in area caused by unfavorable weather at seeding time. In Italy, the wheat crop probably will be somewhat larger than the 1968 harvest and the proportion of durum in total output should increase sharply.

Current conditions indicate that barley output probably will not equal the 38 million tons produced in 1968 although the barley area is slightly larger. Barley crops in France and West Germany were expected to be roughly the same as in 1968 but a storm in early July reportedly caused considerable damage to the French crop. Some increases in output over last year's relatively poor barley crops are expected in the United Kingdom and Greece, while in the Scandinavian countries the crop is not expected to be as large as in 1968.

Production of rye and oats in Western Europe probably will decline somewhat in 1969, continuing a downward trend. The area seeded to these grains was down slightly this year.

A sharp increase in total corn production is very likely due largely to area expansion in the most important countries, France and Italy. Production in France could somewhat exceed last year's record of 5.2 million tons; Italy's outturn is forecast to increase sharply to an estimated 4.5 million tons.

Area and production of potatoes in Western Europe are expected to decline further in 1969; production may be 2-3 million tons less than the 63-million-ton outturn last year. Potatoes were planted unusually late in the United Kingdom in 1969; this probably will reduce yields. Also, a rather sharp decline in potatoes is forecast for France in 1969. And production in Austria may be much smaller than the good 1968 crop.

Total area planted to sugarbeets is estimated to be about the same as in 1968, almost 1.8 million hectares. Prospects for sugarbeets appear generally favorable despite a cold spring. The area planted declined in the United Kingdom, France, and Italy but increased in West Germany, Spain, and several of the smaller producing countries.

Olive oil production should approximate the 1967 record level of over 1 million tons. A decrease in olive oil output one year is generally followed by an increase the following year. Since olive oil production in Italy, Greece, and Portugal in 1968 was less than in 1967, increased output is expected this year in these countries. Spain was the only major producing country in Western Europe to experience an increase in olive oil output last year.

Total rapeseed production in Western Europe is expected to exceed the 1968 level, due mainly to larger production in France. A good quality 1969 crop is forecast for France and total production could reach 550,000 tons, surpassing last year's record. In West Germany, an increase in area and improved weather following the late spring should result in an output at least equal to 1968. In Scandinavia, Sweden's production should be about the same as in 1968, while output in Denmark, a less important grower, should decline sharply.

Livestock: The cattle cycle in Western Europe has apparently reached a peak and is entering a downturn. The hog cycle is in a declining phase in most countries, but pork output will probably stabilize or increase slightly by late 1969. Poultry production--meat and eggs--in most countries remains less expansionary than in the mid-1960's. Growth in broiler output will approximate the expected gain in domestic consumption in most countries as self-sufficiency has been increasing in their former export markets in Western Europe. Dairy output in 1969 is expected to exceed the 1968 level in the region. Although beginning-year dairy cow numbers were about the same as in 1968, further increases in output per cow are expected to add to Western Europe's problems of excess dairy production. The livestock situation suggests slightly better U.S. export prospects for some livestock products than in 1968, but limited prospects for the much more important trade in feedstuffs.

West European cattle numbers--almost entirely dairy or dual-purpose breeds--at the start of 1969 were less than 1 percent above 1968. Most of this gain was

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in the European Community, particularly in France. The United Kingdom, Spain, and Ireland also registered small gains. Because of export difficulties, Denmark, like most Scandinavian countries, continues to reduce cattle numbers. Continued improvement in milk production per cow should result in moderate expansion in milk output, especially in France and other EC countries. This prospect threatens further buildup of the troublesome dairy surplus. Surplus EC and U.K. butter stocks will continue to accumulate. Surpluses of nonfat dry milk and cheese in Western Europe are also expected to grow further in 1969. The age and sex distribution of cattle at the beginning of 1969 indicated little prospect for growth in beef and veal output for the region. In fact, a small decline may be recorded for 1969. Calf slaughterings were down in early 1969; because of favorable prices, farmers decided to feed calves to heavier weights.

Hog numbers at the beginning of 1969 were 76 million--about the same as a year earlier. Small increases were registered in the United Kingdom, the Netherlands, and Austria. Declines were noted in West Germany, Denmark, and Spain.

Pork production for the region is expected to remain below year-earlier levels throughout most of 1969. However, output in Benelux and the United Kingdom is expected to increase 3 to 6 percent. Prices are generally above last year's, reflecting short supplies. Favorable price prospects could lead toward some recovery in production near the end of 1969. Prospects for recovery appear good in France and Denmark.

The rapid growth in poultry output and self-sufficiency--especially in broilers--in most West European countries and a slowdown in the formerly rapid growth in consumption have led to a less buoyant market for both meat and eggs. Lower domestic prices and reduced prospects in West European export markets have depressed output growth in recent years. Poultry production gains in 1969 will probably remain close to consumption increases in the region, allowing little prospect for a step up in imports. EC production is expected to increase by 5 to 6 percent.

This report updates a more comprehensive report published in March 1969: The Agricultural Situation in Western Europe--Review of 1968 and Outlook for 1969, ERS-Foreign 258.

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THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

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MIDYEAR REVIEW

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SUMMARY

The outlook for 1969 agricultural production in Communist areas is generally favorable. Despite difficulties with the fall-sown and early-sown spring crops in many countries, favorable conditions for major spring crops were widespread. Livestock production stagnated and even declined in some countries during the first half of 1969, but a better feed outlook and increases in livestock numbers are expected to boost output the second half.

In the USSR, damage to the winter grain crop, especially wheat, reduced the fall-sown area, but the area seeded to spring wheat and other spring grains was a record. Moisture conditions were good in many areas of European Russia and in the eastern Virgin Lands regions. A grain crop between the 1966 record and the good 1967 crop is expected. Prospects for other crops at midyear generally were good. Output of livestock products was retarded during the first half of 1969 and meat supplies were less than in 1968, but conditions at midyear favored an improvement.

In Eastern Europe, agricultural prospects were fair to good. A record grain crop is possible there if favorable conditions continue. In Bulgaria, Hungary, Romania, and Yugoslavia, the situation is much improved from a year earlier, when drought reduced output. In Czechoslovakia, another good crop is expected. But in East Germany and Poland prospects were poorer with grain production unlikely to reach 1968's record level. In early 1969, livestock inventories were down in many countries. Stagnation or a reduction in meat production was evident in several countries, but an upturn is forecast for second-half 1969.

In Mainland China, the outlook for the autumn harvest, which includes two-thirds of the grain and most industrial crops, was relatively favorable at midyear. Good moisture conditions in the main winter wheat belt also suggest a good harvest. China could achieve or surpass last year's level of wheat output. New plans to increase wheat imports this year have been announced. The outlook for the early rice crop, which yields about 30 percent of total rice production, is not as favorable as that for wheat. Output should about equal last year's poor production.

T 1969

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In North Korea and North Vietnam, weather conditions were better than usual for the grain crops; North Korea could have a record output. North Vietnam had favorable spring rice planting conditions, but production delays were reported.

Cuba's all important sugar crop was reported at 4.7 million tons for 1969, and its government may have difficulty meeting export commitments.

PREFACE

Information on agricultural conditions in Mainland China, North Korea, North Vietnam, and Cuba is limited. This report is based upon weather data and statements about crop conditions contained in Attache reports from Hong Kong, newspapers, journals, and radio reports from the respective countries, and reports by commercial, academic, and other specialists familiar with the countries. This information is evaluated by ERS specialists in light of historical and other information bearing on the agriculture of these countries.

USSR

The Soviet agricultural situation at midyear was generally favorable, but a hard winter and late spring made summer and fall weather more critical than usual.

Winter grain damage: Extreme cold, high winds, and low rainfall during December and January reduced the winter grain area about 6 million hectares from the 1967 and 1968 levels to about 27 million this year. Most of the reduction was in winter wheat and winter barley, a minor crop. The surviving winter grains had developed well going into the winter and received additional fertilizer in the spring. Although the onset of spring was late, growing conditions have been generally good.

The 1969 winter wheat area is about 15 million hectares, compared with an average of 19.5 million in recent years, and winter barley covers 0.5 to 1 million hectares against 1 to 1.5 million in recent years. Winter rye apparently escaped serious damage. The most likely prospect now is that the winter wheat crop will be below the 1968 level, possibly as much as 5 to 7 million tons. 1/

Spring grains: After a late start the sowing of spring grains progressed rapidly. By mid-May the rate of spring sowing matched that of many other years in this decade. A record 98 million hectares of spring grains were sown (about 9 million above 1967 and 1968), including a record 51.3 million hectares to wheat. The barley, oat, and corn areas are all up sharply over 1968 and earlier years. Corn is reported at 5 million hectares compared with 3.5 million recently. The barley area is probably up about 3 million hectares to around 21 or 22 million hectares. On June 19 the total grain area (winter and spring) was almost 125 million hectares, up 3.5 million over 1968.

There are some Soviet regions where growing conditions are clearly unfavorable, especially the North Caucasus, including Krasnodar Krai, and the Middle and Lower Volga. But in a number of very important regions July 1 conditions were good to excellent. In the major Virgin Lands regions--Kazakhstan

1/ Tonnages shown in this report are metric.

and Eastern and Western Siberia--soil moisture has seldom been as good, and these are regions where the spring wheat area was expanded. In the Ukraine and Moldavia soil moisture conditions are also good, in some cases excellent. Certain parts of Central European Russia and the Volga region are also good.

Total grain outlook: Indications are that the Soviet Union will produce a good grain crop, but conditions may change sharply from those prevailing in early July. Favorable summer and fall conditions could push the total up close to the record-breaking 1966 and 1968 levels--over 140 million tons--whereas restrictive conditions could reduce it to the 1964 and 1967 levels--in the 122- to 125-million-ton range or below. 2/

The composition of the 1969 grain crop will be more heavily weighted toward feed grains than in recent years. Current wheat stocks, after the large wheat crops in 1966 and 1968, should be sufficient to overcome even a sizable drop in wheat production in 1969, but such a drop is not now indicated. The additional feed grain production in 1969 should give better balance to USSR grain supplies.

Other crops: Spring growing conditions at midyear indicate good prospects for most industrial crops. Although a cold, wet spring delayed cotton sowing this year, the area seeded is reportedly up 90,000 hectares, 4 percent more than in 1968. Government purchase prices for cotton were increased 15 percent for the 1969 harvest, and this should provide additional stimulus to producers.

The sugarbeet area is reported at 150,000 hectares less than 1968, making the area about 3.4 million hectares. Growing conditions are good at this time. The sunflower seed sowing plan was exceeded and the area will probably be near that of 1967 and 1968, around 4.8 million hectares. Growing conditions in the Ukraine and Moldavia are very good, although they are poor in the North Caucasus.

The potato and vegetable area is probably not much different from that of 1968 and conditions appear to be reasonably good except for the cool spring. Potato output has risen in each of the last 3 years and this year's may be close to the 1968 record. Vegetables should be better than the reduced crops of 1968.

Fruit and grape production, which has risen sharply in the past 3 years, (government purchases advancing from 4.5 to 6.0 million tons) will probably match or exceed that of 1968 because of expanded bearing area.

Hay and forage crops were retarded by the late spring. In European Russia, the Ukraine, and many Eastern regions, spring and early summer weather has been favorable for hay and pastures. Heavy spring fieldwork is, however, apparently cutting into hay and forage harvesting.

Livestock products: Increases in livestock product output were limited in 1968 by the short grain crop in 1967 and last year's summer drought in European Russia. The severe winter further curtailed the livestock sector in early 1969. At the end of March 1969 meat production in state processing plants was 11 percent below a year earlier, and milk products were up 2 percent. Through May

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2/ Grain figures for the USSR are USDA estimates of usable grain which are lower than the Soviet reported "bunker weight" figures.

state meat production was still 8 percent behind a year earlier, and milk products equaled the previous May's level.

Good grain supplies from 1968 and the improved pasture conditions this year should improve the livestock situation in the second half of 1969. Livestock numbers likely will increase during 1969. A sizable increase in this year's feed grain harvest should further improve the output of meat, milk, and other livestock products during the last half.

Special 1969 conditions: The severe winter and the shortened growing season have obviously concerned the Soviet Government. The large spring grain area and reduced winter area make the spring crop especially critical. An early fall could pose major problems. Recognizing the critical nature of this year's harvest, the Soviet Government published a special decree in June. It called for speeded up deliveries of harvesting machinery and equipment and provided for special transport and storage facilities and for movement of workers from region to region. In addition, special wage bonuses are provided for rapid harvesting. This decree clearly focuses attention on the Virgin Lands regions where a very large crop is a possibility and where harvesting problems could be serious.

Although this special decree is obviously related to concentrated crop problems this year, it also reflects the fact that supplies of agricultural machinery, fertilizers, transport, and storage facilities have not expended as rapidly as planned in the past 2 years, or as rapidly as the progress made during 1964-65. The plan for 1969 did not hold out the promise of significant improvement.

EASTERN EUROPE

Grain: Grain crop prospects in Eastern Europe as of the first of July ranged from fair to very good. In the southern countries--Bulgaria, Hungary, Romania, and Yugoslavia--the situation was much better than a year earlier when drought reduced output. Soil moisture reserves were much higher as a result of good rainfall throughout early spring and again during early summer. In Czechoslovakia, another good crop is expected. But in East Germany and Poland, prospects were poorer than in 1968, when grain production reached record levels. Some winterkill problems, a delayed and cold spring, and below-normal precipitation in Poland reduced production prospects.

Less than record crops are forecast for most countries in Eastern Europe, but for the entire region a new production high is probable. Total wheat production is expected to increase about 7 percent over the 1968 level and to exceed 1967's record 25 million tons. The wheat area is slightly larger. Rye output is expected to decline substantially from the relatively good performance of 1968. Early indications suggested an increase of about 7 percent in feed grain production from the 34 million tons in 1968, and a crop as large as the 1966 record of 36.3 million tons is possible. A small increase in combined barley and oats output is forecast. An increase in corn area is estimated; the harvest is likely to be considerably above the drought-retarded crop of 1968, given favorable weather the remainder of the growing season.

The grain outlook in the northern countries is poorer than in 1968. Production of wheat, rye, and feed grains is expected to be lower. Rainfall, temperatures, and soil moisture last fall generally were favorable for sowing winter grains--wheat, rye, and some barley--but winter temperatures were below normal and snow cover was light. In Poland, winter precipitation was especially light, damaging the winter wheat crop. The crop generally was only in fair condition this spring. The spring was late and cold; precipitation continued at below-normal levels. In Czechoslovakia, rainfall was below normal in May, but improved in June. By contrast, late snowfalls and above-normal precipitation hindered spring fieldwork in East Germany. Spring sowing in the northern countries generally was 2 to 3 weeks later than last year. Soil moisture levels on July 1 were below normal in Poland and Czechoslovakia, but above normal in East Germany.

A sharp improvement over 1968 is forecast for grain production in the southern countries. Both wheat and feed grain (predominantly corn) production are expected to jump well above last year's levels. Wheat output could attain the 1967 record level, but feed grains will probably be below the 1966 record. Timely rains in September, followed by a dry October, facilitated sowing and germination of winter grains. Winter precipitation was moderate, except during February, when unusually heavy amounts caused flooding problems in some areas. Grains overwintered well. Spring was late and cold and despite below-normal rainfall, soil moisture levels were about normal on May 1. May was hot and dry, but the situation improved with good rains in June, except in Bulgaria, where drought conditions continued to prevail. Rains in the latter part of June caused harvesting difficulties.

The estimated grain production levels should result in a substantial increase in export availabilities in the southern countries. Romania and Yugoslavia should be able to offer large quantities of corn, around 1 million tons each, and Romania will have considerable excess wheat as well. Compared with the 1968 crop, a 1.5 million-ton increase in total grain exports is possible from the 1969 crop. The southern countries are not expected to import significant quantities of grain.

Compared with 1968, imports of grain by the northern countries are expected to increase by about 1 million tons. Purchases probably will be oriented toward wheat from the Soviet Union, but substantial quantities of feed grains may also be imported. For Eastern Europe, as a whole, net imports of almost 2 million tons of grain are anticipated following the 1969 crop.

Other crops: The cold, late spring delayed planting of other spring crops, but production indications still were indefinite for most crops as of July 1. Soil moisture levels were below normal in Poland, Czechoslovakia, and Bulgaria, but relatively favorable in the other countries. Many vegetable and industrial crops are being grown on irrigated land in Bulgaria, reducing the impact of drought.

The total area of oilseeds in Eastern Europe is down substantially in 1969, primarily because the rape crop suffered heavy winterkill. About one-third of the rape crop in Poland was severely damaged last winter and losses also were sustained in East Germany. Consequently, availabilities of rapeseed and

rapeseed oil for export should be reduced. Prospects for the sunflower crop--the major oilseed in the southern countries--were favorable as of July 1.

Areas of potatoes and sugarbeets can be expected to continue the downward trend, but 1969 data are not available. Production of these root crops is concentrated in the northern countries and the outlook generally was only fair on July 1.

Favorable fruit production prospects have been reported from the southern countries. The late spring hampered early vegetable production.

First cuttings of clover and other hay crops in the southern countries generally were good but late, which may reduce the number of cuts.

Livestock: Inventories of livestock in Eastern Europe generally were down at the beginning of 1969, compared with a year earlier, and the consequences were stagnation or reduction of meat production in several countries.

Pork predominates in the meat production of Eastern Europe. The sharpest reductions in hog numbers occurred in Czechoslovakia, Hungary, and Yugoslavia. Foot-and-mouth disease and anticipated or actual reductions in the feed supply played a role in trimming hog herds. Unfavorable market prices may also have contributed to the decline in Yugoslavia.

Cattle inventories also were down at the first of the year. Yugoslavia again led in the cutback, but fewer cattle also were reported in the other southern countries and in Czechoslovakia. Feed shortages were prevalent in most of these countries, and Yugoslavia encountered difficulties in exporting livestock and meat.

Meat shortages existed in Czechoslovakia and Hungary during the first half of 1969. Czech per capita meat consumption is relatively high, but a leveling of production since 1965 and increased demand due to rapid increases in incomes caused pressure on the meat supply. Basic meat cuts were not affected by a general round of retail price increases in May. But proposals were made to purchase meat from non-Communist countries, as well as the traditional Communist sources, to hold down inflationary pressures. The shortages in Hungary reflected the sharp drop in hog numbers--down about 20 percent at the March census from a year earlier. Meat imports were accelerated and slaughter hog exports reduced to counter the situation.

Most East European countries should experience an upturn in meat production during the second half of 1969. Gains in poultry production especially are expected.

ASIA

Mainland China

A cold winter was experienced in the north and northwest provinces of China, spring rains flooded the Yellow River Valley, a tidal wave inundated crop areas

in the Shantung Peninsula, a cold spring developed in the Yangtze and South China area, and a drought was reported in the southwest province.

Offsetting these extremes were good moisture conditions in the main winter wheat belt of Shensi, Honan, Shantung, and Hupeh provinces. Growers there produce about half of the country's wheat output and a good harvest is expected for the area, with excellent harvests expected in some provinces. Favorable rains since April have also been reported in the northeast and northwest provinces, the major spring wheat belt. This improved outlook for spring wheat and the good prospects for winter wheat in the main growing areas suggest that China could achieve or surpass last year's wheat output if the country's remaining wheat areas have average harvests.

The outlook for the early rice crop, which yields about 30 percent of the total rice production, is not as favorable as that for wheat. Extreme weather variations, similar to those experienced during the early stages of the 1968 crop, were again present this year in the major producing provinces, particularly in Kwangtung. Output should about equal last year's poor production, but may exceed it.

Of the other early harvested crops the least favorable outlook is for rapeseed and sweetpotatoes. The severe winter affected rapeseed in the major growing area of the Yangtze Valley and cold snaps in Kwangtung reduced winter sweetpotato yields.

The brighter side of China's agriculture in 1969 is the improved condition of the autumn harvest, which includes two-thirds of the grain crops and all industrial crops except rapeseed. Drought in Northeast China, where soybeans and coarse grains predominate, was relieved by timely rains in late April and May. Moisture conditions in the North China Plain are better than usual. Good soil moisture in most of the northern provinces favored spring planting of soybeans, cotton, tobacco, and coarse grains. Adequate to excessive moisture was reported in South, Central, and East China where intermediate rice and sweetpotatoes predominate. No serious flooding or waterlogging developed in these areas during the first part of this year. The area of late rice could reach the high levels of 1966.

With average weather the rest of the crop season, the late-summer and autumn harvest of grains and industrial crops could be good. Increased inputs of fertilizers, better cropping preparations and management, tighter discipline, and improved leadership in farming areas should contribute to productivity. The government has recently emphasized that hog numbers should be increased on both collective and private farms. This move suggests some confidence in the availability of feed. The program is designed primarily to increase meat products for export and to improve hard currency earnings. Hogs also represent an important source of fertilizer in China.

Between 4 and 5 million tons of wheat were purchased by China for delivery in 1969. Although some 1.2 million tons of wheat remained uncommitted under the Sino-Canadian wheat agreement that expired July 31, there was no immediate evidence of a new agreement with Canada or of any plans to increase wheat imports this year. Preliminary evidence for 1969 suggests that China's imports of wheat may be guided by price advantages rather than by pressing needs.

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North Vietnam

This year North Vietnam's spring rice crop was planted under favorable conditions. But mid-July reports indicate unsatisfactory progress in the fall harvested crop, which provides about 60 percent of the total rice crop. The 1969 rice crop is not expected to exceed the 4.3 to 4.5-million-ton level of recent years.

North Korea

Preliminary evidence of weather conditions in North Korea during first-half 1969 shows no adverse weather pattern developing. The more nearly-normal conditions compared with the drought in 1968 suggests that the grain harvest could exceed last year's estimated 5.2 to 5.5-million-ton level. Press reports have indicated that rice planting was completed earlier in some areas than in previous years and that spring fieldwork progressed favorably. Total grain output--prior to last year's record--has reached 5.0 million tons in good years since 1963, but declined to as low as 4.0 to 4.3 million tons in poor years.

Mongolia

Current reports indicate a considerable improvement in the weather pattern for the current crop year as compared with the serious blizzards and drought experienced during the 1967/68 crop year. Plans for 1969 call for planting some 500,000 hectares. Grains will approximate 90 percent of the total crop area. A grain harvest of 360,000 to 370,000 tons is predicted.

CUBA

Cuba's 1969 sugarcane harvest is tentatively estimated at 4.7 million tons, about a million tons under the 1965-68 average. Cane-cutting operations lagged during the year, and Castro described this year's output as "the agony of Cuba." Poor weather in Oriente Province and major shortcomings in the availability and use of labor have been cited as the reasons for the 1969 shortfall. This suggests that Cuba might have difficulties meeting its export commitments. The USSR and other East European countries usually take large quantities, and under the current sugar agreement, signed last year in Geneva, Cuba was granted a 2.1-million-ton annual export quota on the world market.

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Agriculture

THE AGRICULTURAL SITUATION IN AFRICA AND WEST ASIA

1969 MIDYEAR REVIEW

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ERRATIC WEATHER RESULTS IN LOWER CROPS IN AFRICA AND AVERAGE CROPS IN WEST ASIA

Early forecasts that the 1969 cereal est in North Africa would equal last s record crop have failed to material- For the coming year, North Africa's ipated breadgrain deficit will exceed lion tons.1/ Acreage planted to food is estimated near normal levels, but sive rains in some areas and drought hers have severely reduced yields in ons of Morocco, Algeria, Tunisia, and . Production in the United Arab Re- c and the Sudan, however, is reported ge or better. Both countries should more cotton available for export. Africa will also have exportable ities of olive oil, rice, wine, cit- ruit, and hides and skins.

In West and Central Africa effects of year's erratic weather are still be- elt. Widespread drought (notably in , Upper Volta, Mali, Senegal, and tania) caused a shortage in subsist- food crops, necessitating U.S. food donations under Title II of Public Law 480. The shortage should end when the 1969 crops of millet, sorghum, corn, and other food crops are harvested in October and November. Early estimates place the 1969/70 coffee crop in the Ivory Coast at a level 14 per- cent above the previous crop. In Liberia, rubber production is increasing as more new high-yielding trees come into production. In the Congo, several basic food crops have essentially achieved pre-independence pro- duction levels; palm oil production there is up from 1968. But Senegalese peanut production during the 1968/69 season plummet- ed to the lowest level of recent years be- cause of extensive drought.

Due to Rhodesia's record crop, 1969 output of corn in Southern Africa was up about 400,000 tons. While too much rain reduced Zambia's crop slightly, production in the Republic of South Africa was off about 350,000 tons from last year due to drought. Prospects are good for South Africa's winter grain crops--wheat, barley, oats, and rye. The Republic's record citrus

1/ All tonnages in the report are metric.

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crop last year was of outstanding quality and provided alltime high export earnings. Deciduous fruit production and export were also higher; 1969's deciduous crop is estimated to be slightly larger than 1968's. Though there were spots of drought, grazing conditions over most of Southern Africa favor a slight increase in livestock numbers.

East Africa's agricultural outlook for 1969 is good. Major cash crops are expected to equal or exceed last year's output. Tea and cotton production should show moderate gains. For cereal crops conditions are generally favorable, and Kenya's corn and wheat surpluses will likely be greater.

West Asia has experienced erratic weather conditions. Even so, the general grain situation appears good. Wheat production in Turkey will be slightly higher than last year. Turkish cotton production was up 10 percent in 1968 and production in 1969 will probably match the 1968 level despite a considerable drop in acreage. Tobacco acreage this year is slightly down in the Aegean area where plantings of Mexican wheat varieties were expanded. Early estimates indicate that Iran's wheat production did not reach last year's record harvest but its increased cotton plantings point toward another recordbreaking crop. Good fruit and nut harvests are expected in Iran. A late spring outbreak of rinderpest reduced both milk and meat supplies, especially in the Tehran area. The veterinary force moved rapidly to meet this threat.

In West Asia's Levant area, heavy spring rains benefited Syria more than Lebanon. Syria's barley suffered some, but abnormal weather caused serious losses to the Lebanese deciduous fruit crop. Current reports indicate that Israel's wheat crop for 1969 was down considerably from last year. Value of the country's citrus exports was slightly higher than last year, though export volume was down. Well-distributed rainfall in Jordan promised well above average crops for 1969. Cyprus also has received good rains and its wheat and barley crops should be good.

NORTH AFRICA

The United Arab Republic, despite lower yields, is likely to harvest a 1969 cotton crop a tenth larger than last year's 435,000-ton crop. Indications are that cotton acreage increased some 14 percent to a level of 1.7 million acres. Smaller yields were attributed to severe leaf spot disease and some leafworm infestation. A larger crop this year would mean a reversal of the previous 4-year downtrend in production.

Although official estimates are not available, indications are that UAR's grain harvest this year will equal or surpass that of a year ago. This year's harvest must be supplemented by some 2 to 2.5 million tons of wheat imports to maintain normal consumption levels. By mid-July, various European countries had contracted to supply a large portion of the UAR's wheat needs on liberal credit terms. For the past 2 years, France has become increasingly important as a supplier. Other suppliers include the USSR, Spain, West Germany, and Italy.

Reportedly, progress continues to be made in realizing economic benefits from the High Aswan Dam. Moreover, foreign aid grants and continued expansion of the petroleum industry have partially offset the adverse conditions facing the Egyptian economy in recent years.

The Sudan cotton harvest was estimated at 209,000 tons, 7 percent above last year. This increase in output reflects improved spraying and picking operations. Yields in extra-long-staple producing areas (Gezira and Managil) have improved. In the Gash and Tokar Deltas, where upland-type cotton is grown, production has increased despite acreage cutbacks.

Sudan's cotton exports in the 1968 crop year totaled $151.2 million, the highest ever reached and one-third more than in 1967. The increase was due to a larger shipping volume--up 23 percent--as well as higher prices--up 8 percent. Major buyers were West Germany, India, Italy, and USSR.

During 1969 the Sudan renewed a long-term trade agreement with the USSR to cover $23 million worth of cotton exports to the USSR in exchange for 400,000 tons of sugar and unspecified quantities of urea.

Tunisia's 1968/69 cereal production is expected to total below last year's subnormal

crop of 519,000 tons. Wheat production is estimated to be somewhat less than the previous 383,000-ton harvest. Tunisia will again have to import substantial amounts of bread wheat to meet domestic needs.

Despite last winter's drought, 32,000 acres of Mexican wheat planted in northern Tunisia produced good yields. This was attributed largely to the shorter growing season of these varieties as compared with local wheats.

Algerian grain crops may be smaller than expected as early estimates of a near-record cereal crop have been revised downward. A good harvest of winter cereals in 1968 produced 2.1 million tons, and it was thought that this year might be even better. Latest reports indicate, however, that excessive rains at harvest time have caused officials to be much less optimistic about the outturn of this year's grain crop.

Morocco's grain harvest (mostly wheat and barley) may be as much as 50 percent below last year's record 4.8 million tons. This would be very near the 1960-65 average of about 2.5 million tons. The reduced crop was largely due to ill-timed and excessive rains--double the annual average in some areas. Morocco has carried over large stocks of wheat from last year, but may still have to import some bread wheat in the coming year.

Under the joint USAID-Moroccan wheat improvement program, plantings of high-yielding Mexican wheat varieties totaled 12,400 acres. Output of these dual-purpose plantings (demonstration and seed production) did not reach the expected levels since leaf blight seriously affected them in many areas.

Morocco and Tunisia Sign Agreements With European Community

This year, Morocco and Tunisia took the first step toward full association with the European Community by signing 5-year agreements in March. The accords, which went into effect on September 1, provide for mutual trade preferences and for resumption of negotiations on enlarging and advancing the associations by the end of the third year.

Intra-Community customs treatment is provided for most Moroccan and Tunisian industrial products. For agricultural products, the EC lowered its common external tariff from 20 percent to 4 percent for citrus fruit originating in Morocco and Tunisia as long as the minimum offer price is observed. Crude olive oil from these two countries has a $50 per ton conditional preference over third-country imports if the minimum import price is observed. In addition, a $5 per ton unconditional preference also is granted. The EC grants either Intra-Community treatment or a 50-percent tariff reduction for some canned foodstuffs. Wine, some vegetables, and certain sugar-based preserves are excluded from Community preference, but retain privileged access to the French market.

In return, Tunisia grants preferential treatment to Community products equal to 70 percent of the preference allowed France on products representing 40 percent of Tunisia's imports from the EC. Moroccan concessions include tariff reductions averaging 12 percent on 27 customs categories. These reductions are granted on a most-favored-nation basis and therefore apply to imports from all countries.

WEST AND CENTRAL AFRICA

Yaounde Convention Renewed, Trade and Aid Agreements Extended 5 Years

Negotiations for renewing the 1964-69 Association Agreement (Yaounde Convention) between the European Community and 18 African states have been completed. The new Convention was signed on July 29, 1969, at Yaounde, Cameroon. It will enter into force only after parliamentory ratification by all 24 signatories. In the meantime provisional measures guarantee the continuity of the Association. 2/

To promote financial and technical cooperation, Community members agreed to make $1 billion available to the European Development Fund. That figure includes $918 million for the Associated African States with the following breakdown:

2/ Four signatories--Burundi, Malagasy Republic, Rwanda, and Somali Republic--are in East Africa, as defined for this midyear review.

$748 million will be in grants, $80 million in loans on special terms, and $90 million in loans through the European Investment Bank. The previous Convention included $230 million worth of aid toward agricultural production and diversification in associated countries to ease the transition from marketing under bilateral preferential systems to the proposed free trade system between EC members and associates. There is no provision in the new agreement to continue such aid. But associated countries with economies endangered by sudden declines in world prices affecting primary products will qualify, under specified conditions, for aid grants.

Trade provisions include the lowering of the EC's common external tariff for a number of tropical products (coffee from 9.6 percent to 7 percent, cocoa from 5.4 to 4 percent, palm oil from 9 to 6 percent). They also provide for an EC undertaking to grant preferences on certain African products competing with EC farm produce. Annexed to the Convention transaction is a stipulation that nothing in the agreement shall prevent an Associated African State from participating in a system of generalized preferences.

* * *

At this time, it is too early to forecast 1969 crop production in West and Central Africa since most crops have recently been planted.

In several West African countries, the 1968/69 crop year was a lean one for many subsistence farmers. These countries--Mauritania, Senegal, Mali, Upper Volta, and Niger--which suffer from periodic droughts, experienced a severe shortage of rainfall during 1968.

Senegal's 1968 production of rice, sorghum, and millet--staples of the Senegalese diet--totaled an estimated 500,000 tons against 750,000 tons in 1967. Mali's production of millet, sorghum, corn, and rice for 1968 was estimated to be 40 percent below the previous year's 990,000-ton harvest. In Niger production of sorghum and millet, by far the most important food crops there, was adversely affected by drought, especially in the country's central region. The 1968 crop was estimated at less than 1 million tons, off considerably from the 1.34 million tons a year earlier.

Extensive and severe drought reduced Senegal's 1968/69 peanut production to the lowest level of recent years. Recent estimates place the crop close to 770,000 tons, of which 620,000 tons are to be commercialized. As a result of the poor crop, Senegal is unable to meet this year's commitments to all local and overseas peanut crushers. Peanut deliveries to oil mills are expected to be around 100,000 tons short of the total agreed upon when the season began.

In Liberia, sharp recovery of the natural rubber price is giving new bounce to its agricultural economy. The New York price of natural rubber fell as low as 16.29 cents a pound in February 1968 but rose above 30 cents by August 1969.

Rubber production is increasing, due mostly to replacement of old trees by new, higher-yielding stock. In the early 1970's, rubber production likely will increase by 5 percent a year.

In 1968, area in mature rubber trees totaled 163,500 acres. Immature trees covered 115,400 acres, with 69,700 acres on private Liberian-owned farms.

Liberian exports of natural rubber in 1967 amounted to 62,000 tons. This compares with shipments of 48,000 tons by Nigeria and 30,000 tons by Congo (Kinshasa), Africa's third largest rubber producer. (Nigerian rubber exports in 1967 were much below average because of the civil war).

Liberia's maiden industrial plant for palm oil produced its first 25 tons of red palm oil during 1968. The plant is located on the Tidewater Oil Co. plantation in Grand Bassa County. By the end of 1969, Tidewater will complete planting of its projected 5,000 acres of oil palms.

At the same time, in Grand Cape Mount County, the West Africa Investment and Finance Corporation has begun development of a 3,500-acre oil palm plantation. Technical assistance and seeds for this plantation are furnished by the French research organization IRHO (Research Institute for Tropical Oils and Oil-bearing Materials). Several thousand acres of land have been cleared, an oil palm nursery is in operation, and some transplanting is under way.

The Ivory Coast's coffee crop for 1969/70 is forecast at 4.0 million bags

(240,000 tons), 14 percent larger than the 1968/69 crop of 3.5 million bags. This level is substantially above its quota under the International Coffee Agreement.

While Ivory Coast has a rather wide list of exportable farm products (chiefly coffee, cocoa, bananas, and pineapples), coffee is the country's most important product. The size of the crop, amount exported, and price received are all important to the nation's economy.

The United States is an important customer for Ivorien Robusta coffee, much of which is used in instant coffees. The new freeze-dried process is not good news for the Ivory Coast, as this method uses less Robusta than instant coffee made by older processes.

Ghana's governing body, the National Liberation Council, has formally instituted the Cotton Development Board to promote cotton production. About 2,100 acres likely will be planted to cotton by the end of 1969. The price paid to growers for seed cotton has been increased from 5 to 7 new pesewas per pound (from 4.90 to 6.86 cents per pound). A cotton gin costing 75,000 new cedis ($73,500) is to be built at Tamale in 1970.

Cotton growing will help diversify Ghana's essentially one-crop economy (Ghana is the world's largest grower of cocoa beans) and add a cash crop to the economy of northern Ghana.

Dahomey will soon have a new peanut oil mill. This plant will have a crushing capacity of 45,000 tons of peanuts (in-shell) and produce 14,400 tons of peanut oil and 15,500 tons of peanut oil cake. A French company has been contracted by the Government to build the crushing plant. The Dahomean National Marketing Board is managing the project.

Nigerian farmers are receiving considerably more money for their cocoa beans this year than last. Grades I and II beans are bringing 50 Nigerian pounds ($140) per long ton more this year. Grade I cocoa is now £N150 per ton ($420 per ton or 18.75 cents per pound). Grade II cocoa is now £N135 ($378 per ton or 16.88 cents per pound). These rates were effective July 11, the beginning of the 1969/70 marketing season. Marketing board announcements were made simultaneously in Western, Lagos, Mid-Western, and South-Eastern States. Similar increases were announced for Kwara State; in that minor cocoa-producing region, Grade I cocoa now brings £N152 per ton and Grade II cocoa £N137 per ton, slightly higher than in the other cocoa-producing states.

All cocoa sales are subject to a state "produce sales tax" of £N4 ($11.20) per ton. It is deducted by licensed buying agents of the marketing boards.

The Northern States Marketing Board announced June 16 that it will purchase peanuts at the rate of $83.72 per long ton (3.7 cents per pound) during the 1969/70 buying season beginning October or November 1969. This represents an increase of $10.92 per long ton (0.5 cent per pound) over last year's price. As during the 1968/69 buying season, the Marketing Board will pay a uniform price in all the Northern States and will buy just one grade of peanuts. A higher world price for peanuts permits this higher price to farmers. Announcement of the increased purchase price at the beginning of the planting season will probably encourage farmers to plant larger acreages than otherwise.

Central African Republic's 1969 cotton crop may be a record. A preliminary estimate places 1968/69 production at 55,000 to 59,000 tons of seed cotton.

Farm production in Congo (Kinshasa) continues to increase following the monetary reform of 1967 and the return of internal security and stability. Basic food crops such as cassava, sweetpotatoes, and plantains have essentially achieved pre-independence production levels. But due to population growth, per capita food production in 1968 was 32 percent below the 1957-59 average. Imports of corn, wheat, and rice are necessary to make up the difference.

Palm products are the Congo's leading agricultural export and second largest foreign exchange earner, following copper. Palm oil production for 1969 is estimated at 220,000 tons compared with last year's 210,000-ton crop. Exports of palm oil in 1968 totaled 143,000 tons, compared with 1967 exports of 114,900 tons. Exports in 1969 are

expected to be above the 1968 level. The reduction of export duties from 15 to 2 percent on palm oil at the end of 1968 should help to increase exports.

Coffee and rubber, also important export crops, have registered production and export gains in recent years as more plantations resume normal production.

Helping to hold back agricultural production in the Congo is the transportation problem. While virtually all of the 1968 crop was marketed, inadequate roads, bridges, ferries, and truck transport in most farming areas may cause difficulties for the anticipated much larger 1969 harvest.

SOUTHERN AFRICA

The Republic of South Africa harvested slightly less than 5 million tons of corn in 1969 due to a severe first-quarter drought in the major producing areas. To insure sufficient supplies of white corn for consumption and stocks, South Africa made arrangements to import 735,000 tons of Rhodesian white corn. Meanwhile, it rescinded the ban on corn exports and started exporting some yellow corn. By the end of this marketing year, the Maize Control Board expects to export about 100,000 tons of yellow corn--a rather low figure.

Corn exports for the marketing year ended April 1969 reached an estimated 2.7 million tons. This is close to the record of 3.1 million tons in 1967/68. The largest purchaser of South African corn for both years was Japan, taking 1.1 million tons in 1968/69 and 1.2 million the previous marketing year. Next came the United Kingdom with 0.8 million tons in 1968/69 and 0.9 million in 1967/68. Japan purchases large amounts of yellow and white corn, although usually more yellow. Almost all sales to the U.K. are for white corn.

Conditions are generally good for such winter grains as wheat, barley, oats, and rye. Another record wheat crop of about 1.36 million tons is expected. More farmers in South Africa are switching from corn to winter grain production.

Both production and export of fruit from the Republic of South Africa in 1968 continued an upward trend. Total fruit exports were estimated at $146.7 million, compared with $123.6 million the previous year. The United Kingdom continued to be the largest buyer.

The record 1968 citrus crop of 622,000 tons was of outstanding quality and provided record exports that reached $38.8 million. Oranges, valued at $31.7 million, were the most important export, going mostly to United Kingdom and other European countries. The 1969 citrus crop is estimated to be slightly larger than last year's record harvest. Probably more than half of the crop will be exported, since local consumption is increasing relatively slowly.

Deciduous fruit production and export also increased in 1968. Apples showed the most gain as exports rose from $9 million in 1967 to a record $33 million in 1968. Canned deciduous fruit production and export, primarily peaches, are also increasing. In 1968, exports of canned peaches were valued at $26 million.

Wool is a major export of the Republic of South Africa, averaging $163 million the past 5 years. Exports were 10 percent higher for the first 4 months of 1969 compared with the same period last year. Wool prices for 1968/69 were slightly above year-ago levels.

In much of Southern Africa, especially in South-West Africa, Botswana, Swaziland, and Lesotho, grazing conditions were generally good this past year.

The government of Rhodesia has decided to continue price supports for the 1969/70 flue-cured and burley tobacco crops set at almost 60,000 tons and 2,200 tons, respectively. However, the government has withdrawn its support for the Oriental tobacco crop, which is grown mostly by Africans.

Although the number of tobacco farms has declined since 1965, the tobacco industry is still very important in Rhodesia's economy. The government has to contribute heavily to support the industry. Not only does the government pay a support price for tobacco, but it also pays the cost to store large stockpiles of tobacco.

Rhodesia's good weather during 1969 will probably result in a quality tobacco

crop that will reach at least the amount guaranteed support by the government. This same good weather helped produce record corn and wheat harvests.

Too much rain in Zambia has resulted in a lower corn crop which will not meet domestic needs for the second consecutive year.

In Mauritius, if favorable conditions continue, the 1969 sugar crop may reach 660,000 tons, up nearly 11 percent over the 1968 harvest. The United Kingdom is the principal outlet for this sugar.

EAST AFRICA

EAC Negotiates New Agreement With EC

Representatives of the European Community (EC) and the East African Community (EAC) have agreed to renew the Arusha Agreement with some modifications. Kenya, Tanzania, and Uganda are expected to sign the pact in the fall of 1969 at Arusha, Tanzania. This new agreement will be similar to the one of July 1968, which was never ratified.

The new EC-EAC pact provides for duty-free entry into the EC for all East African industrial products. For three important exports from East Africa (coffee, cloves, and pineapples) the EC has reserved the right to impose duties once imports have reached the following specified levels:

	Import trigger levels
Coffee.....	56,000 tons a year
Cloves.....	100 tons
Canned pineapples...	860 tons

In turn, the EAC will grant trade preferences between 2 and 9 percent, on a list of products covering about 10 percent (by value) of the EC's exports to East Africa.

* * *

Kenya's agriculture is expected to show an overall increase in 1969. Coffee production in 1968 was 46,000 tons; it is estimated at 50,000 tons in 1969. The deteriorating effect of the coffee berry disease has abated after extensive and effective spraying.

Tea production this year is estimated to exceed the record 30,000 tons harvested in 1968. Last year 1.5 million tons of corn were produced and a crop of 1.6 million tons is predicted for 1969. Wheat production in 1968 totaled 227,000 tons and should increase slightly this year.

During 1969 Tanzania continued to make progress in its livestock development program. A $1.3 million credit from the International Development Association (IDA) will assist in the first stage of a livestock program intended to diversify the country's agricultural production. The funds will be used to develop five large ranches encompassing 420,000 acres to increase beef output and expand breeding stock. Program development will be by the National Agricultural Company, Ltd., a subsidiary of the National Development Corp. set up by the Tanzania government.

Tanzanian coffee production in 1968 was 54,000 tons and this year's crop is forecast at that level. Production of tea should increase from 8,000 tons a year ago to a record 1969 crop of about 10,000 tons. Also, Tanzania's cotton crop will be up some 2,000 tons to an estimated 56,000 tons. But sisal production is expected to fall 10,000 tons to the 210,000-ton level.

In Uganda, agriculture supplies over 60 percent of the gross domestic product. Cotton and coffee are the largest agricultural items. Because of this heavy dependency, attempts at greater diversification are being pursued and should produce some results in 1969. More vegetables are being produced, as well as more cereals and beef cattle. New strains of cotton with higher yields and longer staples have been recently developed. These, together with slightly better prices to growers, are expected to result in a slight increase in cotton output. The coffee crop, estimated at about 165,000 tons, is below the 1968 output of 188,000 tons, but is considered near normal. Tea production is forecast at 15,500 tons, slightly above the 1968 level.

Beginning in January 1969 Uganda dropped the imperial system and began to use metric weights and measures.

Ethiopia's economy is growing annually at a modest but steady 4 to 4.5 percent rate,

despite falling prices for Ethiopian coffee the past few years. Short run prospects for a significant increase in earnings from other export products do not seem good, although promising long-range projects have been started. Both government and private investors are showing increased interest in developing the Empire's potential for production of crops and livestock. The World Bank (IBRD) has agreed to finance construction of a major hydroelectric installation on the Finchaa River, a tributary of the Blue Nile.

WEST ASIA

Turkey's 1969 wheat crop is preliminarily estimated at about 8.6 million tons, compared with 8.4 million tons last year. Production of Mexican wheat varieties currently estimated at 2.1 million tons is more than 4 times last year's crop, but yields at about 45 bushels per acre are down 5 to 7 bushels from 1968 levels. Despite the larger wheat crop, imports will be necessary to maintain a normal level of consumption. Production of barley and the other grains should be above last year.

Cotton production in 1968 was 435,000 tons. A drop in acreage for the 1969 crop is not expected to have much effect on production. This year's decline in cotton acreage occurred in the coastal regions of southern and western Turkey, where Mexican wheat varieties replaced some cotton. As a result, the upswing in cotton acreage may have been reversed.

Tobacco acreage will be slightly down this year in the Aegean area, reflecting in large part the increased area of Mexican wheat. Production for 1968 was 162,000 tons, down 12 percent from a year earlier.

The latest 1968 production estimate on filberts is 130,000 tons. Because of favorable weather conditions, the 1969 crop should be about the same. This was to have been an "off" year for Turkish filbert trees. Total exports during the current marketing year should amount to about 125,000 tons. It is also an "off" year for olives. This means a smaller total oil crop.

Except for goats, livestock numbers continue to expand, and slaughtering continues to increase. There were no imports of red meat into Turkey in 1968 but some 500 breeding animals were imported. The government continues to press its program for livestock improvement. However, per capita consumption of red meat in Turkey remains a low 14 kilograms per year.

Iran received heavy fall and spring rains which delayed grain planting and reduced the area seeded to wheat. In some areas flooding also destroyed acreage already seeded. Early estimates indicate that 1969 wheat production will not reach last year's 4.4 million tons. Torrential rains also destroyed some rice in the Caspian area, however, the output of rice this season is expected to be about 45,000 tons above last year's 970,000-ton crop due to acreage expansion and better seed selection. Weather also delayed cotton planting, but, with more acreage planted, a 25-percent increase is expected over the 145,000 tons harvested in 1968. This larger crop may cause marketing problems; early this summer, about 25,000 tons of last year's crop remained unsold.

The government, interested in expanding oilseed production, tested various kinds and varieties of oilseed crops and found that sunflowers are adaptable to Iran's climatic and soil conditions. Under the Fourth Development Plan (1969-73), Iran hopes to achieve self-sufficiency in vegetable oil production. In the past year about 120,000 tons of vegetable oils were consumed, including 45,000 tons domestically produced.

Good fruit and nut crops are expected, as most trees escaped late frosts and soil moisture is above average. For crops in general, the heavy rains probably washed away some soil salts that hinder growth and greatly improved ground water supplies.

In central Iran, around Tehran, there has been an outbreak of rinderpest. Although official figures on cattle losses are not available, losses in the province of Tehran alone were reportedly rather heavy. Khorasan Province also was affected. This outbreak led to a shortage of beef and

a drop in milk deliveries to pasteurization plants. Prompt measures by the veterinary service now appear to have the outbreak under control. There were also significant sheep losses in winter and early spring storms. However, pastures in Iran for the 1969 grazing season were excellent. This situation should help improve the country's livestock industry.

In Iraq the development budget has been increased by 29 percent with the aid of foreign loans. Iraq has several projects aimed at increasing farm output by adding irrigated acreage and upgrading dairy-poultry production. For the 1969 crop year, increases are indicated for sugar beets, cotton, and grains. Accurate estimates are not currently available.

In Syria, spring rains beneficial for most crops delayed cotton planting and reduced the area planted. Cotton and barley suffered from unfavorable weather, but a good harvest is expected for other crops. The deciduous fruit crop should be good, and favorable pasture conditions likely will result in bumper lamb and kid crops.

Lebanon's abnormally wet spring, two hailstorms, and hot winds caused serious damage and sharply reduced the 1969 fruit crop. Regional spot checks indicate that the apple crop may be off as much as 50 percent. Greater damage may have been suffered by apricots (70 percent) and pears (60 percent). Lesser damage was done to citrus fruits (estimated 20 percent) and cherries (30 percent).

Although the reduced apple crop may help to alleviate the perennial problem of disposing of surplus apples, it may seriously affect the cash income of some small farmers. The apparent lower fruit crop which will be available this year was reflected in higher prices to farmers for apricots and cherries and in higher consumer prices. Prospects of a smaller crop have also prompted greater activity by middlemen, who are making advance contracts for apples, peaches, and pears at prices reported to be substantially higher than last year.

The area planted to grains has been increased slightly and good weather conditions promise a harvest of some 50,000 tons of wheat, 12,000 tons of barley, 2,500 tons of corn, 1,400 tons of sorghum. This total of about 65,900 tons is considerably better than 1968's level of 52,200 tons. The pulse crop is expected to approximate last year's harvest.

Jordan's well-distributed rains this year, along with other favorable weather conditions, should produce well above average crops. The increasing use of improved varieties of wheat should bear favorable results and change the farming attitudes and concepts of wheat growers.

For this year, some 200,000 tons of wheat and 30,000 tons of barley are given as preliminary production estimates. These figures are somewhat above last year's levels. The generally favorable weather should result in ample moisture for fruit trees and summer crops.

Israel's wheat crop for 1968 has been finalized at 190,000 tons, about 14 percent below the 1967 record crop. This year's estimate is smaller. Wheat imports for 1968 were 346,000 tons and about the same is forecast for 1969.

Last year's agricultural exports were close to $160 million, a new high. Despite a lower export volume of citrus, good prices in European markets brought the value of citrus shipped abroad to near $86 million, about the same as last year.

Newcastle disease, which has been plaguing Israel's poultry industry since 1967, is under greater control but has not been eradicated. It has lowered egg production.

Agriculture in Cyprus has recovered well from the previous year's drought. Generally good crops are expected. Agricultural exports continue to expand, especially citrus. Agriculture accounted for 57 percent of the total value of goods exported in 1968. Citrus, potatoes, carobs, vine products, and carrots continue to find good markets in the United Kingdom, Europe, and the USSR.

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1969 MIDYEAR REVIEW

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AGRICULTURAL OUTPUT UP SHARPLY

A strong rise is anticipated for 1969 agricultural output in the Western Hemisphere countries. 1/ Weather has been favorable in important farming areas of the Caribbean and South America that experienced severe drought last year; and Latin American agricultural output is expected to reach record levels. Near-record grain yields in Canada are expected to more than offset a cutback in the wheat area there. On the negative side, some decline is likely for Canada's livestock products. Also, Mexico's farm production may only approach year-earlier levels due to a drop in cotton.

Mid-September conditions indicated a significant recovery for wheat, coffee, and sugar in the major Hemisphere producing countries. Larger crops of barley, oats, rice, rapeseed, flaxseed, and soybeans will be harvested. In contrast, the sunflower and corn harvests will probably be down sharply. Production of cotton and livestock products may be little changed.

Larger 1969 exports of cotton are in prospect and Hemisphere trade in coffee, sugar, and bananas should be maintained near high 1968 levels. Those export gains may be more than offset by a decline in grains. Increased food production in the important importing countries suggests a possible reduction in Latin America's agricultural imports which may be partially offset by some rise in Canadian purchases. Recent trade trends are reflected in U.S. agricultural imports from Latin America for January-July 1969. The value was 4 percent below the same 1968 period. Meanwhile, U.S. farm exports to Latin America dropped 18 percent due, in part, to the extended U.S. port strike.

Wheat production in 1969 is estimated significantly above the reduced levels of a year earlier, and Hemisphere supplies for 1970 will be an alltime high. The sharp cutback in Canada's wheat area will probably be more than offset by near-record yields. Argentine plantings are below the 1968 record but 1969/70 production is expected to exceed last year's low level. Larger harvests are anticipated for Mexico and Brazil.

Brazil's rice production continued to rise in 1969; larger rice crops, particularly in Ecuador, Peru, and the Dominican Republic, will probably more than offset smaller harvests in Chile, Guyana, and Venezuela. Feedgrains are expected to reach higher production levels in 1969. Corn production will drop sharply due to reductions in Canada,

1/ This review excludes the United States and Cuba.

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Brazil, and Mexico. In contrast, increased area and high yields resulted in unusually large Canadian barley and oats crops. Sorghum grain harvests are estimated at record levels in Mexico and Argentina.

High world cotton prices in early 1968 encouraged a continued expansion of plantings for early 1969 harvests in Brazil and Colombia. Peru's production declined and Mexico's area, now in harvest, was reduced sharply in response to a weakening of prices late in 1968. Central America will also produce less cotton, but total Hemisphere output is expected to approximate the high 1968 level. However, due to larger 1969 exports and an anticipated decline in Brazil's 1970 crop, export supplies may be lower next year.

Oilseed production will probably be larger in 1969. A record Canadian rapeseed crop is forecast, and flaxseed will be near record. A recovery in Brazil's peanut production was supplemented by record outturns of cottonseed and soybeans. An anticipated decline in Mexico's cottonseed may be partially offset by an increase in other oilseeds. However, Argentina's production of sunflowerseed dropped for the second year, indicating a sharp reduction in vegetable oil exports.

Coffee production is estimated to be up sharply in 1969 due principally to recovery in Brazil. Last year's drought did heavy damage to Peru's sugar crop. However, production recovered to near record levels in the Dominican Republic and was up significantly in Central America, Brazil, and Colombia. Current reports indicate serious hurricane damage to the Honduran banana crop.

During January-August 1969, there were indications of a significant drop in Canada's exports and slaughter of livestock as higher prices encouraged producers to increase herds. Mexico's beef exports may be higher due, in part, to an early 1969 drought. Argentine beef output is currently estimated slightly above 1968. Some decline is anticipated for Uruguay.

CANADA HARVESTS LARGE GRAIN AND OILSEED CROPS

Unusually high yields forecast for Canada's 1969 wheat crop will more than offset a sharp drop in area. Production of other important grain and oilseeds may be near record. Livestock exports and slaughter through August were down sharply from the 1968 level. Lower animal numbers on farms indicated that slaughter and exports would continue reduced, as higher prices encouraged producers to hold back cattle and hogs. Grain exports for 1968/69 (August-July) were down sharply from a year earlier and the carryover into the new marketing year was an alltime high.

Record wheat stocks and anticipation of lower prices encouraged a 15-percent cutback in the 1969 wheat area with a significant shift to feedgrains, oilseeds, and summer fallow in Canada's important Prairie Provinces. The seeded area for barley, flaxseed, soybeans, and forage crops continued a strong uptrend and the rapeseed area was record large.

A cold, wet spring delayed planting in the Prairie Provinces so the 1969 harvest is later than usual. However, growing conditions were extremely favorable for Prairie grain and oilseed crops. Despite the sharp cutback in area, spring wheat is estimated to be up slightly from 1968. The durum crop was double last year's outturn. Barley production was up sharply from last year's high level, and there was a significant increase for oats. A record rapeseed crop is forecast and flaxseed will be near record. In contrast, unusually wet weather is expected to reduce yields and quality of some eastern crops, including corn, forage, winter wheat, and tobacco.

Production of selected agricultural commodities in Western Hemisphere countries, average 1960-64, annual 1967-68 and forecast change 1969

Commodity and country	Average 1960-64	1967	1968	1969 1/ change
	1,000 metric tons			
Wheat				
Canada	14,650	16,137	17,686	+
Mexico	1,539	2,057	1,793	++
Argentina	7,165	7,320	5,900	+
Chile	1,181	1,203	1,220	*
Rice				
Argentina	178	217	238	++
Brazil	5,566	6,792	7,000	+
Colombia	532	700	780	+
Guyana	224	217	225	-
Peru	337	384	194	++
Venezuela	111	243	271	-
Corn				
Canada	903	1,882	2,051	--
Mexico	6,237	8,500	9,200	-
Argentina	4,778	8,000	6,560	+
Brazil	9,436	12,824	12,452	-
Barley				
Canada	3,563	5,414	7,084	++
Argentina	753	599	556	+
Oats				
Canada	6,095	4,691	5,591	+
Argentina	748	690	490	+
Peanuts				
Argentina	311	354	283	--
Brazil	542	751	470	+
Soybeans				
Canada	164	220	246	+
Mexico	19	121	267	++
Brazil	290	716	625	++
Sunflowerseed				
Argentina	634	1,120	940	-
Chile	40	33	40	--
Rapeseed				
Canada	226	561	424	++
Chile	42	61	41	++
Cotton				
Mexico	480	435	523	--
Cent. America	193	221	212	--
Argentina	111	87	73	++
Brazil	482	445	600	++
Colombia	70	97	120	++
Peru	138	90	100	-
Coffee				
Mexico	146	168	168	+
Cent. America	331	403	346	++
Brazil	1,550	1,380	990	++
Colombia	466	480	480	*
Sugar, cent.				
Mexico	1,723	2,430	2,301	*
Dominican Rep.	829	813	667	++
Cent. America	405	706	714	+
Brazil	3,461	4,465	4,483	+
Colombia	382	674	723	+
Guyana	326	322	365	++
Peru	807	747	758	--
Beef and veal				
Canada	677	827	885	-
Mexico	456	480	530	+
Cent. America	155	171	181	*
Argentina	2,208	2,570	2,600	+
Brazil	1,376	1,506	1,550	+

1/ Symbols denote the following: * no significant change; + significant increase up to 10 percent; ++ a sharp increase exceeding 10 percent; - a significant decline of up to 10 percent; -- a sharp decline exceeding 10 percent.

Due to last year's increased slaughter and export, Canada's cattle and hog numbers on December 1, 1968, were below a year earlier. For the first 8 months of 1969, cattle and calf slaughter declined 5 percent and hogs by 12 percent, although liveweight prices moved up sharply to record levels. Higher Canadian prices restricted feeder cattle exports and encouraged a rise in shipments to domestic feedlots. In contrast to reductions on December 1, 1968, hog numbers on farms as of June 1, 1969, were 6 percent above a year earlier.

Canada's grain exports reflected growing competition from large world supplies and difficult marketing problems imposed by very large domestic stocks. Wheat exports for August-June 1968/69 were 6 percent below a year earlier. Also, oats and barley shipments were down sharply with moderate gains recorded for oilseeds. A significant decline is also anticipated for cattle and meat exports. Despite a possible later recovery in grains, Canada's farm exports will be lower in 1969.

In contrast, Canadian demand for imported agricultural products appears strong. Lower livestock slaughter led to significantly expanded meat imports early this year. Corn imports for January-July 1969 were also above the same 1968 period, though Canadian supplies of barley and oats were large. For that period, U.S. agricultural exports to Canada were up nearly 20 percent and there was a strong possibility that the 1969 trade would exceed the record levels of the past 3 years.

COTTON DECLINES IN MEXICO AND CENTRAL AMERICA

Lower prices led to a sharp cutback in cotton plantings this year in Mexico and Central America. Expansion in Mexican agriculture may be further restricted in 1969 by a 2-month delay in summer rains, a dry spell which reduced pastures and yields of food crops in some areas. Favorable agricultural conditions are expected to increase rates of growth for agricultural output in the Central American countries.

Mexico: A rise near 2 percent for 1969 agricultural output is likely, compared with 5 percent in 1968. The drop in cotton and some drought reduction of corn yields were expected to be more than offset by larger harvests of other feedgrains, coffee, and winter vegetables. Previous dry weather is also expected to result in some rise in 1969 cattle slaughter and export.

Planting and growing conditions appeared to have been generally favorable for wheat and a near-record 1969 crop is reported. A significant expansion in rice and sorghum grains is continuing; but the 1969 corn harvest may be lower due to drought damage for small farm production.

Cotton plantings for the 1969 harvest are estimated nearly 20 percent below 1968, with resultant sharp drops in cotton and cottonseed production. However, because of a sizable expansion in production of other oilseeds such as soybeans and safflower, Mexico will be virtually self-sufficient in vegetable oils this year. Harvests of tomatoes, melons, and strawberries are expected to exceed previous records, and coffee production maintained a rising trend. Beef production and exports may move to higher levels due to strong demand and early drought.

Additional export gains are likely for cotton, corn, and winter vegetables. U.S. agricultural imports from Mexico for January-July 1969 were significantly above the same period in 1968, reflecting increases in beef and vegetables. U.S. agricultural exports to Mexico also were up sharply for that period.

Central America: Agricultural conditions were favorable in Central America through midyear 1969, but the September hurricane "Francelia" reportedly damaged Honduran bananas. The prospective decline in cotton is expected to be more than offset by larger 1969 harvests of coffee, sugarcane, and food crops. Current estimates indicate a recovery for agricultural output in El Salvador, Guatemala, and Honduras. The 1969 growth rate for the region should exceed last year's small increase, despite a possible drop in Nicaragua and some slowdown in other countries.

A weakening of world prices in late 1968 resulted in a cutback in 1969 cotton plantings in all producing countries with a very sharp drop estimated for Nicaragua. Coffee production probably will be up sharply in El Salvador and Guatemala. Sugarcane harvests were below a year earlier in El Salvador and Honduras, but moved up significantly in other countries, particularly Guatemala. Banana production should continue at high levels, and Guatemala's 1969 corn crop may exceed previous records.

Central American exports of bananas likely will be higher in 1969, with shipments of other agricultural products near 1968 levels. U.S. agricultural imports from Central America for January-July 1969 were above the 1968 pace. U.S. agricultural exports were down sharply during that span due, in part, to the shipping strike.

AGRICULTURE RECOVERS IN THE CARIBBEAN AND SOUTH AMERICA

Near-normal growing conditions through early 1969 indicated a sharp recovery in agriculture from last year's drought in important areas of the Caribbean and South America. Despite some continuing drought effects in certain areas, Caribbean sugar and other crops should benefit from improved weather conditions. Agricultural output in Argentina, Brazil, Colombia, and Venezuela is expected to move to high levels with a significant recovery in Peru and Ecuador. Overall South American food and agricultural output may be at a record level in 1969.

Caribbean: Adequate moisture helped maintain favorable growing conditions in the northeast Caribbean, including the Dominican Republic and Haiti, since the drought was broken near midyear 1968. Rains were much later in Jamaica and low moisture levels in some areas may keep 1969 production near the low 1968 level. Trinidad's and Tobago's production is expected to maintain a strong uptrend.

Despite lower sugar content in the cane, 1969 sugar production in the Dominican Republic is estimated to be up sharply from the reduced 1968 harvest. Some 1969 recovery is anticipated for Haiti and sugar production in Trinidad and Tobago increased again. However, the Jamaican harvest likely will be below levels of a year earlier.

The Dominican Republic's production of food crops, including rice and bananas, is forecast to be up sharply; and the shortfall in Jamaican sugar may be partially offset by gains in bananas, citrus, and vegetables. Cocoa production may be lower this year in Trinidad and Tobago; they may record significant gains in pork and milk.

Some recovery is anticipated for Caribbean agricultural exports in 1969. Strong demand should maintain imports at 1968 or higher levels, despite some rise in food production. U.S. agricultural imports from the Caribbean in January-July 1969 were above the 1968 level. U.S. farm exports dropped sharply but some improvement is likely later this year.

Argentina: Prospects are for a slight recovery in Argentina's 1969 agricultural production. Substantially larger harvests of such early crops as feedgrains, rice, cotton, and citrus offset a decline in oilseeds and deciduous fruits. Current conditions indicate a larger 1969 wheat crop despite drought conditions reported in some

areas. Improved pastures should raise meat output slightly above 1968 levels and encourage some recovery in milk and wool.

The area planted for 1969 feedgrains continued to expand. Corn yields equaled those in 1968 despite dry, hot weather early in the growing season and the sorghum grain harvest was a record. Rice production also reached an alltime high, reflecting favorable prices and excellent growing conditions. With the government support price at year-earlier levels and excessive rainfall at planting in some areas, the wheat area declined from the 1968 high. Extended dry weather is reported in the northern wheat zone but the 1969/70 crop is expected to exceed last year's small harvest.

Despite a significant increase in planted area, sunflowerseed production dropped for the second year. Yields were reduced by early hot weather and by excessive rains near harvesttime. Peanuts also continued to decline. Expansion in 1969 cotton increased cottonseed output. Flaxseed plantings will probably be larger due to diversion from wheat in some areas. Output of edible oils is expected to continue at very low levels through early 1970, and high prices may encourage a sharp increase in sunflowerseed plantings for 1970.

Argentina's deciduous fruit crop suffered from adverse weather, but a record 1969 citrus harvest is expected. Beef production may exceed the 1968 level as good pastures and improved export demand from the United Kingdom and other European markets encourage recovery in slaughter later this year. Better pastures are also expected to boost output of mutton, wool, and milk above the depressed 1968 levels.

An unusually large carryover from 1968 permitted Argentina to maintain wheat exports near low levels of the previous year, but imports have been authorized for domestic use. Increased production and strong demand encouraged a sharp rise in export of corn and sorghum grains. In contrast, exports of vegetable oils and oilseed meals will drop sharply in 1969, and some oil imports have been authorized. The value of meat shipments may rise sharply from last year's low level, reflecting growing demand for beef cuts and cooked meats.

Brazil: With recovery from the 1968 drought, Brazil's agricultural output should resume a strong uptrend in 1969. Corn production was much lower than 1968 but cotton continued to increase. Most other crops responded favorably to increased demand and improved growing conditions. Food and agricultural output for 1969 may exceed previous records and agricultural exports should be near the high levels of recent years.

Lower prices led to sharply reduced corn plantings for 1969 with a significant diversion to cotton, oilseeds, and other crops. The rice and wheat harvests will increase again this year and a significant recovery is anticipated for beans and other basic food crops. Peanut plantings were increased, and areas for cotton and soybeans were up sharply from previous records.

Despite some effect of last year's drought, the 1969 coffee crop was much larger than the preceding harvest. However, due to heavy July frosts, the 1970 crop may be down sharply. The Sugar and Alcohol Institute raised the sugar production quota to meet anticipated domestic and export requirements. A slight rise is anticipated for meat and milk production.

Brazil's cotton exports will be up sharply this year due to greatly increased supplies, and soybeans may exceed the 1967 record. Trade in coffee and sugar should be close to last year's level, but corn shipments will drop well below the 1968 record. Agricultural imports may decline in the face of larger wheat and food supplies. U.S. exports of wheat and other agricultural products to Brazil through July 1969 were down sharply from a year earlier.

Chile: Agricultural output in Chile will be significantly reduced during 1969 by serious drought which continued from mid-1968 through April this year. Priority controls on reduced water supplies for irrigation helped maintain production of higher valued fruit and vegetable crops. Wheat production nearly equaled that in 1968 because larger plantings in the normally excessively wet southern region compensated for losses in the drought area. However, yields were down significantly for rice, corn, oats, barley, and potatoes. Meat production likely will be lower than in 1968 when drought encouraged unusually heavy cattle slaughter.

Chile's agricultural imports, particularly of feedgrains and fats and oils, will probably continue near the high 1968 levels, which were increased sharply to meet drought shortages. U.S. agricultural exports to Chile for January-July 1969 were below a year earlier but some increase may occur later this year.

Colombia: Colombian agriculture should continue a strong growth trend in 1969 and output is expected to exceed last year's record. Weather conditions were favorable in most agricultural areas and the government continued strong efforts to expand agriculture in support of its trade diversification program.

Wheat production may be lower this year, and some decline is anticipated for the 1969 barley crop. High support prices encouraged larger corn plantings and production may be a record. Rice production continued to rise. Cotton maintained the strong uptrend of recent years. Soybean production may be down due to diversion to other crops. A good year is reported for coffee, and good pastures indicate some rise in meat and milk.

Colombian exports should reflect larger cotton shipments in 1969, and some surplus of corn and rice may move to foreign markets. Strong demand should encourage a rise in agricultural imports, particularly wheat. U.S. exports of agricultural products to Colombia for January-July 1969 approximated the 1968 level, but imports dropped.

Peru: The severe drought was broken by rains in late 1968. Improved moisture conditions in the highlands, along with larger irrigation supplies in the arid coastal region, indicate an increase in 1969 agricultural output. However, production will still be below earlier years and food imports may continue at relatively high levels.

Cotton and sugar production will be lower this year. The important long-staple Tanguis crop, planted near midyear 1968, was cut back sharply with a significant diversion to later planted crops. However, later plantings of northern Pima will be larger due to higher prices and increased irrigation supply. The rains were too late to prevent a sharp drop in 1969 sugar production.

Rather substantial cotton lands were shifted to plantings of rice. Later than usual transplantings restricted rice yields, but production will be up sharply. Some cotton area also shifted back to corn and 1969 production may be near the high 1967 level. A significant rise is also anticipated for highland food crops including wheat, barley, and potatoes.

Peru's 1969 agricultural exports will reflect smaller supplies of cotton and sugar. Imports of rice will probably continue at a high level, though less than in 1968. Corn purchases may be lower, but larger imports of wheat and fats and oils may be needed. U.S. agricultural exports to Peru, down the first 7 months of 1969 from a year earlier, may recover later this year.

Other South America: Excellent growing conditions in Bolivia and Venezuela during early 1969 give promise of another good agricultural year there. With recovery from last year's adverse weather in Ecuador, Guyana, and Uruguay, total agricultural output for 1969 may be significantly above 1968.

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Venezuela's rice yields were reduced by heavy rains which delayed plantings. Guyana's crop suffered from dry weather. Harvests in Ecuador and Uruguay were up sharply from the 1968 low. A significant recovery is anticipated for Uruguay's corn and oilseed production in 1969. Further, output of later cereals and flaxseed should be near last year's improved levels. Guyana's sugar production is estimated up sharply. However, meat production is expected to decline in Paraguay and Uruguay.

This report was prepared under the direction of Howard L. Hall, in the Western Hemisphere Branch. The report is based upon information available as of mid-September It updates a more comprehensive report published in April 1969. The Agricultural Situation in the Western Hemisphere--Review of 1968 and Outlook for 1969. ERS-Foreign 261.

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THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA

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HIGHLIGHTS

Total farm production in the Far East and Oceania in 1969/70 is expected to exceed the record level of the previous year. This favorable outlook stems from improved farming methods and practices, along with generally good growing conditions.

Most countries in the region enhanced their foreign trade position during the first half of 1969. Higher export levels of industrial products accounted for much of the gain. Exports of rubber, tropical fruit, meat, wool, and a few other agricultural products were up moderately through midyear, aided by higher prices for some of these commodities. But reduced exports and lower prices for rice totally or partially offset other export gains by some countries.

The situation for rice, the region's most important crop, has changed significantly. Although production in 1969/70 will be record high, exports from surplus producing countries and imports by deficit countries are both significantly lower. Higher production and reduced trade have resulted in the price decline.

Wheat production in 1969 is at an alltime high for the region. Production is up in both India and Pakistan. Australia's crop will be down only moderately from the record harvest of the previous season. It appears that Australia will export less wheat in 1970 and accumulate large stocks. All other Far East countries import wheat; most will take slightly more in 1969/70, as per capita wheat consumption continues to grow in Asia.

Far East and Oceania feedgrain production is up but not enough to take care of the region's booming poultry and livestock industries. Consequently, import requirements are higher. Thailand's exports of corn will likely be at a record level in the current marketing year. Its recent agreements with Japan and Taiwan cover trade in corn during the Thai marketing year begun September 1, 1969.

Production of oilseeds will be up in 1969/70 primarily because of improved weather in the major growing areas of India. On the other hand, copra production will be down

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due principally to drought in the Philippines. Soybean and soybean oil imports will continue to increase.

An unexpected rapid rise in rubber prices in 1969 is benefiting several countries. New York quotations near 28 cents per pound in October 1969 contrast sharply with the 16.5 cents in early 1968. Malaysia, the world's largest producer, is gaining most from the higher prices; tappings there are up in 1969. Other countries benefiting include Cambodia, Ceylon, Thailand, and Indonesia.

Japan is by far the most important importer of agricultural products in the region. It is also the largest foreign market for U.S. agricultural products. Growing foreign pressures recently led the Japanese Government to liberalize its trade restrictions, including those on agricultural imports. In September the government announced that 22 agricultural commodities would be subject to import liberalization by the end of 1969. These include soybean meal, rapeseed meal, cake mixes, fresh apples, fruit purees, and unrendered pig fat. However, many commodities of interest to the United States were not included.

FARM PRODUCTION

Far East and Oceania agricultural production in 1969/70 is expected to exceed the previous year's record high. Most countries will share in the increase. Food grain production in India may reach 100 million tons 1/, compared with the previous record of 95 million tons in 1967/68.

Generally favorable weather should account for much of the prospective production gains. Also contributing to the record outturn in prospect are: Record use of chemical fertilizers in every country; increased planting of improved varieties of rice, wheat, and other grains; expanded irrigation; more multiple cropping; increased mechanization; and wider use of improved farming techniques.

Factors Influencing Production

Weather: Rainfall and other weather conditions affecting crop production have been favorable in most of the region in 1969. Heavy monsoon rains throughout the Indian subcontinent have generally been very good for production. However, considerable flood damage occurred to crops in East Pakistan and parts of Eastern India. Continental Southeast Asia had adequate rainfall during the summer, in contrast with last year's severe drought in South Vietnam, Cambodia, and Thailand. On the other hand, farm production in the Philippines is still suffering from a drought that began some 3 years ago, but which seems to have abated since July.

Weather conditions have mostly favored agricultural production in Australia during 1969; record harvests of cotton, tobacco, and rice are reported. The big exception is Queensland where drought has prevailed for some time over large areas. Dry weather is also

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1/ All tonnages in the report are metric.

reported in the Barkly tableland district of the Northern Territory and parts of Western Australia. Not only pastures and beef cattle but also such crops as corn, grain sorghum, wheat, and oilseeds have been affected by drought. Both the Commonwealth and Queensland governments have set up programs to aid farmers by transporting feed to the affected areas or by moving cattle to pastures in other states.

In Korea summer rains have been very favorable for the rice crop. This contrasts with very damaging droughts in 1967 and 1968. Up to late September growing conditions in Taiwan were quite good, but typhoons Elsie and Flossie brought high winds and excessive rainfall, causing considerable damage. Cool damp spring weather and some flooding in Japan dimmed prospects for another record rice harvest.

Inputs: Although still quite low in most South and Southeast Asian countries, the use of fertilizers and other capital inputs has expanded very rapidly throughout the region. India is projected to distribute 3.2 million nutrient tons of fertilizer in 1970/71, compared with an expected 2.4 million in 1969/70 and 2.0 million in 1968/69. Korea's consumption of fertilizer in 1969 is estimated to total 740,000 tons, up from 640,000 tons in 1968 and 486,000 in 1967. Taiwan's fertilizer usage has nearly doubled in the past 5 years and will approximate 1.2 million tons in 1969.

In some countries, lower prices for rice and other food grains have reduced the incentive for farmers to use fertilizer. Indonesia's falling rice prices substantially reduced the farmers' ability to purchase fertilizer. In consequence, its fertilizer stocks have accumulated with resultant storage problems. Additional supplies, apparently not immediately needed, have been purchased abroad. To avoid storage problems or costly diversion of recent purchases, the government is considering lowering the price of fertilizer to the farmer or raising the price the farmer is paid for his rice.

Best results from the use of new high-yielding varieties of grains have been obtained from planting improved varieties of wheat on irrigated land in northern India and West Pakistan. Both areas harvested record wheat crops in 1969 despite very dry weather. The largest production gains owing to new varieties of rice planted have occurred in the Philippines and West Pakistan, but significant gains have also been made in several other countries. Unfortunately, the new rice is not well liked by consumers and it usually sells at a discount. Current research on high-yielding varieties is placing much emphasis on developing more palatable rice.

Commodity Developments

Rice: Rice is the most important crop and food staple in all countries of the region except Afghanistan and those in Oceania. Production in 1969/70 is expected to be a record high for the third year in a row. Recent sharp increases are attributable to generally good growing conditions, widespread planting of new high-yielding varieties, and to record use of fertilizers and other capital inputs.

Record rice harvests are expected in 1969/70 in all of South Asia. Largely because of exceptionally favorable weather, rice production in India is forecast at 63 million tons,

compared with 59.6 million the previous season. 2/ In Pakistan the 1969/70 crop is forecast at roughly 750,000 tons above the 1968/69 harvest of 19.5 million. Floods and pest damage in East Pakistan have dimmed earlier prospects for a good crop this autumn, the first of 3 harvest seasons there. However, the expanded use of fertilizers on the large winter crop in East Pakistan and increased planting of high-yielding varieties in West Pakistan should result in a larger total 1969/70 harvest for all of Pakistan.

Ceylon's production likely will total 1.4 million tons. This is about 4 percent above 1968/69 but below earlier forecasts because a drought lowered yields of the early-autumn Yala crop. About half of Ceylon's rice area is now planted to new high-yielding varieties. Indications are that Nepal's harvest this year will barely surpass 1968's 2.4 million-ton crop.

Japan's 1969 crop, harvested from September to November, is forecast at 17.7 million tons, compared with 18.1 million last year. Despite the slightly lower production in prospect, the government's November 1 carryover stocks will be about 7 million tons of paddy–the highest on record. For the past 11 seasons, the Japanese Government has provided incentives to rice growers by increasing producer prices. The fixed prices for paddy rice were increased from $81 per ton in 1962 to $306 in 1968. The price for the 1969 crop was set at the 1968 level, but it is still about three times the U.S. price.

Unfavorable prospects for world rice trade, added to Japan's high prices, and rice varieties not sought in the global market have practically excluded Japan from being a rice exporter. To cope with the surplus problem, Japan has acted to limit production and facilitate marketing of rice during 1969/70. Chief among these actions are: (1) diversion of land to other crops, (2) introduction of a limited free market system, and (3) maintenance of the 1969 price of rice at the 1968 level. By these steps, the government hopes to reduce rice production and modify its control over markets. The possible allocation of 1.1 million tons of 1969-crop rice for sale as feed is being studied. If this shift materializes, it would likely reduce feedgrain import levels in late 1969 or early 1970.

Following 2 years in which drought sharply reduced rice production, the 1969 harvest in Korea is expected to reach a record 6 million tons, up from 4.4 million in 1968. In Taiwan a crop of 3.3 million tons is forecast, roughly the same as in 1968. In Hong Kong where rice acreage has declined sharply year by year, the 1969 harvest is expected to total only 12,000 tons, down from 14,000 tons in 1968. After many years as a major importer, the Philippines attained self- sufficiency in rice in 1968. Despite a severe drought, the Republic's 1969 rice crop will substantially exceed the 1968 harvest, enabling the country to meet domestic requirements and possibly providing a small surplus for export. Efforts, though somewhat reduced, are continuing to be directed toward the increased planting of high-yielding varieties, expanded irrigation, and improved production practices.

Thailand's 1969 rice crop likely will approximate 14 million tons, compared with last season's outturn of 12.4 million. Burma's current crop should barely surpass the 8.0 million tons harvested in 1968. South Vietnam's rice harvest should be close to 5.0 million tons, compared with the drought-reduced 1968 outturn of 4.4 million tons. Due to the expanded use of high-yielding varieties, production in Laos was up sharply in 1968 and may be moderately higher this year. Indonesia's current crop is forecast at around 16.8 million tons, compared with 16.3 million tons in

2/ All rice production figures are in terms of paddy.

1968. In Malaysia indications are that the 1969 rice crop will be at least 5 percent above the previous year's record outturn of almost 1.1 million tons.

Expansion of irrigation in the Coleambally and the Murray River areas of New South Wales contributed to a 14-percent increase in the area planted to rice in Australia in 1969. A record 255,000 tons was harvested in 1968/69, compared with 220,000 tons the previous year.

Wheat: Australia's wheat crop, which will be harvested in December-January, is forecast at 13.6 million tons, compared with 14.7 million in 1968/69. The area sown is reported at 27 million acres, a million more than in 1968/69. Weather and growth conditions have been excellent except in Queensland and Western Australia where dry weather is expected to result in some lowering of yields

India's 1969 harvest was a record 18 million tons, surpassing the previous high recorded last year by 1.4 million tons. Dry weather caused low yields in some nonirrigated wheat areas, but yields from the high-yielding varieties of wheat grown under irrigation were uniformly high. The 10.9 million acres seeded to the newer varieties were about 4 million more than in 1968 and accounted for about three-fourths of the total wheat crop. Due to the favorable supply situation, food zones for wheat were eliminated in Northern India in early 1969 except for the city of Calcutta. Farmers in the surplus wheat states of the Punjab, Haryana, and Madhya Pradesh may now transport wheat privately to such deficit states as Bihar and Uttar Pradesh for sale in the open market.

Pakistan's 1969 harvest totaled about 7 million tons, or 8 percent more than in the previous season. The record outturn was achieved by using improved varieties and more fertilizer, since very dry weather during the winter drastically curtailed yields of nonirrigated wheat and also caused a shortage of irrigation water in some areas. The area planted to improved varieties in 1969 reportedly reached 5 million acres, compared with 2.3 million acres a year ago. By using the newer varieties and growing winter wheat as the second crop on land that produces rice in the summer, Nepal substantially increased its wheat harvest every year for the past 5 seasons. The 1969 harvest is estimated at 227,000 tons. Afghanistan's 2.9-million-ton crop this year compares with 3.1 million in 1968 and 2.6 million in 1967. The decline in 1969 is reportedly due to wet weather at harvest time and to some increase in disease damage.

Wheat production in Japan in 1969 is estimated at only 790,000 tons, about 22 percent below 1968. Some wheat land in Japan is being diverted to urban use, and some to the production of vegetables and other more profitable crops. But more important, farmers have stopped growing wheat and have left the land idle over the winter to work at off-farm jobs. Korea's 1969 wheat harvest is estimated at 374,000 tons, up from 345,000 in 1968.

Other Grains: Good crops of most other grains are anticipated for most countries. Nevertheless, demand for feedgrains is increasing more rapidly than production due to the expanding poultry and livestock industries.

In India a record crop of 29.5 million tons of coarse grains is likely in 1969/70, compared with 25.2 million tons the previous season. Most of the production is used for human consumption. Corn production may reach 7 million tons, up from 5.7 million tons in 1968/69. Grain sorghum production should slightly exceed the 9.8 million tons turned out last season. Production of all millets is forecast to reach 9 million tons, compared with 7.3 million in 1968/69. Coarse grain crops in Pakistan are expected to be moderately above the 1967/68 level of 1.5 million tons after

declining about 17 percent in 1968/69 to an estimated 1.3 million tons. Corn will account for more than half of the coarse grains produced.

In the Philippines, corn production in 1969/70 is expected to show a substantial increase from the estimated 1968/69 outturn of 1.5 million tons, due to expanded plantings and improved production practices stimulated by strong demand. However, production is likely to be barely adequate to satisfy the demand from a growing population and expanding livestock production. The situation is reflected in rising corn prices. Thailand, which exports most of its corn, expects an excellent harvest of 1.5 to 1.7 million tons. Programs in Indonesia for increasing the production of corn for export to Japan are being supported by both the Japanese Government and Japanese business interests. As a Colombo Plan contribution, Japan has an active corn research and education program in East Java where technicians are developing varieties adapted to the area and are also working on problems of drying and fumigating corn. A Japanese company and an Indonesian agricultural cooperative recently agreed to develop a large area in South Sumatra and to produce corn on it for export.

Larger crops of barley and oats are forecast for Australia in 1969/70. Coarse grain prices may be affected by wheat sales for feed outside regular marketing channels.

Coarse grain production is up in several other countries. Korea harvested a record 2.1 million tons of barley in 1969. Nepal's corn harvest this year is estimated up from the 928,000 ton harvest of 1968. In Ceylon corn production in 1969 is almost double the 10,000 tons produced in 1966.

Feedgrain production is declining in Japan and Taiwan as the result of diversion of the limited arable land to more profitable crops or to nonagricultural uses. In Japan, barley production, the largest component of domestic feedgrain production, is estimated at 900,000 tons in 1969, compared with 1 million in 1968. Declines are also expected this year for corn, oats, and rye production. Taiwan's corn production has been placed at 50,000 tons, a 4-percent decrease from 1968. Production of corn in Laos has declined moderately, owing to difficulties in marketing the surplus.

Other Crops: Production of oilseeds will be up in 1969/70 primarily because of improved weather in major growing areas of South Asia. In India, a peanut harvest of about 5.5 million tons is in prospect. This compares with the poor 1968/69 harvest of only 4.5 million tons. In Pakistan the 1969 peanut crop has been forecast at 179,000 tons, more than double the level of 4 years ago. A record cotton harvest is expected in India; indications are that it will be up about 6 percent to total around 1.2 million tons of lint cotton. In Pakistan a record crop of about 550,000 tons is forecast. Tobacco production will be up slightly in India but down in Indonesia. Although the 1968/69 production in the Philippines was expected to be hard hit by drought, the native leaf suffered slight damage and the crop of Virginia type leaf reportedly was one of the best in years. Little change in pulse production is anticipated. In India and Pakistan, land is usually switched from pulses to wheat or other crops when irrigation water is available.

Fruit and vegetable production continues to expand in almost every country of the region. In the last 5 years, West Pakistan's production of oranges, apples, pineapples, mangoes, onions, and potatoes has more than doubled. Japan is expected to harvest its second largest crop of satsuma oranges (tangerines) in 1969; the area planted is up 9 percent. However, Japan's production of most deciduous fruits is estimated to be lower in 1969.

Several countries in South and Southeast Asia depend heavily on the production and export of a few tropical agricultural products for their foreign exchange earnings. Jute and its products

represent the most important source of foreign exchange of both India and Pakistan. India's jute production in 1969 is estimated at 8 million bales (180 kilograms each), compared with the short 3-million-bale crop in 1968 and the good 6.3-million-bale outturn in 1967. Pakistan's production this year is expected to be above the 5.9 million bales produced in 1968; jute production in 1967 was 6.9 million bales. The area planted to jute in Pakistan is declining because farmers are switching some land to rice and potatoes, which have recently been more profitable.

Thailand's kenaf production in 1969 is expected to be up sharply from the 148,000 tons produced in 1968, but the quality is poor. Tea production in 1969 is up moderately in both India and Ceylon, the two major exporters. Rubber output in West Malaysia, the world's largest producer, rose by 12 percent in 1968 to a new peak of 1.1 million tons. Recent plantings of higher yielding stocks accounted for the increase. Production in the first half of 1969 was ahead of the comparable period of last year. Rubber production is also up somewhat in Ceylon and Thailand, but down in Indonesia.

Coffee production improved in Indonesia, the leading producing country in the region. Coconut production is down in the whole region. The drought in the Philippines had some adverse effect on coconut production in 1968, but the effect has been much more severe in 1969; official statements have indicated a production drop of as much as 25 percent. Copra production is down moderately in Indonesia. Black pepper production will be lower in Indonesia in 1969. In consequence, international prices for this commodity rose rapidly in September.

Sugar production in the Philippines will be reduced by the severe drought, which has lingered for 3 years, and the effects of two typhoons last November. In the sugarcane producing areas of Australia, dry weather in the growing period and excessive moisture in the harvesting season resulted in reduced sugar content of the cane. This points to a decline in raw sugar production. This contravenes an early-season forecast of a record outturn of sugar in 1969/70. Sugar production will also be down in Pakistan and Afghanistan.

Livestock: Except for draft animals, livestock have traditionally played a relatively small role in the agricultural economies of most Asian countries. Although per capita consumption of livestock and poultry products is still very low by Western standards, consumption reached record levels in 1969. Indications are that it will continue to rise quite rapidly, particularly in Japan and other countries of the region where incomes are registering substantial increases. The policy in most countries is to try to meet increased demand for livestock products from domestic production. For example, South Vietnam's emphasis on protein has led to a sharp increase in the production of swine and poultry. This policy has resulted in a rapidly increasing demand for imported feedstuffs. Production has gone up most rapidly for poultry and eggs, but also substantially for dairy products and pork. Gains in beef production have been quite moderate.

Japan's poultry meat production for 1969 is forecast at 400,000 tons, up 19 percent from 1968. Total cattle numbers in Japan as of February 1, 1969, are reported at 3.5 million or 9 percent above the 1968 level; about half of the total is beef cattle. Beef and veal production in 1969 is estimated at 175,000 tons or 10 percent above the previous year. Although hog numbers are down slightly, pork production is estimated at 530,000 tons, 2 percent above 1968.

Livestock and their products play a very important role in the agricultural economies of Australia and New Zealand. In Australia, wool production for 1969/70 is estimated at a record 2 billion pounds, some 3 percent higher than the previous year. As of March 1969, sheep numbers

were 6 percent over the same period of the previous year. In New Zealand, wool production is up only slightly in 1969, but improved prices for coarser wools have resulted in significant increases in farm incomes. New Zealand wool prices as of March 1969 averaged 32 cents per pound, compared with 25 cents the same time last year.

Australia's cattle totaled 20.8 million as of March 31, 1969, up 8 percent from last year. Cattle slaughterings in 1968/69 were the lowest since 1963/64, but the increase in meat production to 920,000 tons, the highest level since 1965/66, indicates that animals were slaughtered at heavier weights. Hog numbers as of March 31 were 11 percent above the same date in 1968.

New Zealand is very dependent upon dairying and the export of dairy products. Dairy production for 1968/69 was reported at record levels, with butterfat output estimated at 588 million pounds or 4 percent above last year.

FOREIGN TRADE IN FARM PRODUCTS

Exports

Increased exports and improved foreign exchange balances were recorded for a majority of the countries of the region in the first half of 1969. Higher prices for rubber, wool, meats, and certain other important agricultural export items partly accounted for this improvement. On the other hand, prices for rice and some other export commodities were lower. Much of the export gain in several countries was due to increased shipments of industrial products.

Compared with January-July 1968, Japan's total exports by value for the same months in 1969 increased by 28 percent to $8.7 million. Among the exports showing significant increases were foodstuffs, textiles, chemicals, machinery, and automobiles.

In the first half of 1969, India's exports totaled $912 million, 13.2 percent above the corresponding period of 1968. The trade deficit for the first half of 1969 amounted to $106 million, against $587 million for the corresponding period of 1968. Ceylon's exports during the first 6 months of 1969 totaled $168 million, an increase of $27 million over the first half of 1968. This substantial increase was chiefly due to greater earnings from tea and rubber. Pakistan's total exports increased from $635 million in 1967/68 (July-June) to $693 million in 1968/69. Exports of raw cotton, cotton textiles, tobacco, leather products, and processed foods were all higher, while raw jute and basmati rice exports were lower.

Taiwan's export shipments this year through June totaled $516 million and were 25 percent higher than in the same period of 1968. Comparably imports increased by 14 percent to $533 million. Exports of bananas and canned fruits and vegetables were up, but industrial items recorded the biggest gains. For the first 6 months of the year, Hong Kong's exports were up by 10 percent. West Malaysia had a $75 million favorable balance of trade for the first 7 months of 1969. This was almost four times the surplus of the same period last year. Shipments and prices of rubber and tin were up. Malaysia in 1968 became the world's largest exporter of palm oil. New Zealand reported a balance of payments surplus of $50 million for 1968/69, chiefly as the result of increased earnings from meat and wool exports. Australia's total exports in 1968/69 increased by 10 percent. Its agricultural exports in 1968/69 totaled $2.1 billion, 3 percent above the previous year. South Korea's exports of $274 million for the first half of 1969 were 36 percent more than in the same 6 months of 1968.

For the first time in recent years, Thailand may have an unfavorable balance of payments. Improved earnings from tourism, tin, and rubber exports in first half of 1969 were overshadowed by reduced earnings from rice and large imports. Other countries having difficulty in maintaining export earnings in 1969 include Indonesia and the Philippines.

Rice: Due mainly to expanded production in a number of rice deficit countries, exports and prices of rice have declined over the past year, reducing substantially the outlook for export earnings from this commodity. Japan has changed from a major rice importer to a country producing a large and growing surplus. The Philippines has become self-sufficient, and the import requirements of Indonesia, Malaysia, and South Vietnam have been reduced.

Thailand, Burma, and Cambodia are the countries most dependent on export earnings from rice; others that are somewhat less dependent include Taiwan, Australia, and Pakistan. Thailand is the region's major rice exporter, but the country's exports this year through June were at a 15-year low. For the entire calendar year, Thai exports are expected to approximate 1 million tons or about equal to last year's poor showing. Due mainly to recent unexpected purchases by Indonesia, Burma will reverse a 6-year downtrend by exporting around a half-million tons of rice this year. This compares with only 350,000 tons in 1968. Taiwan's rice exports are expected to total only 42,000 tons in 1969, less than one-fourth the level of 3 years ago. So far in 1969, South Korea has received some 330,000 tons of Japanese rice on a long-term loan basis. Japan is planning to lend Okinawa 30,000 tons during each of the next 3 years and to export 90,000 tons of rice to Indonesia as a part of Japan's aid program to that country. World rice prices rose from 1966 to 1968 but have declined since then. The Bangkok export quotation for white brokens A-l supergrade was $93.60 per ton on September 8, 1969, down from $141.60 a year earlier. Comparably, white rice 100-percent first grade was quoted at $199.20 per ton in contrast to $216 a year earlier.

Corn: Thailand is the major corn exporting country of the region; others include Cambodia and Indonesia. Exports from Thailand were nearly 1.5 million tons in 1968, up from 1.1 million tons the previous year. Exports in 1969 may be somewhat lower because of prolonged negotiations with Japan–the major market– which resulted in a temporary halt in trade around midyear. In contrast with rice prices, corn prices have been generally favorable.

After Japan, the next largest market for Thai corn is Taiwan. Japan recently agreed to purchase at least 540,000 tons during 1969/70 marketing year begun September 1. Under normal conditions, the price will be based on the Chicago quotation for No. 2 U.S. yellow corn the month before shipment is made. If market conditions are abnormal, say another prolonged U.S. dock strike is underway, Thailand can choose to have the price based on the price paid by Japan in procuring from other countries. Taiwan will buy 300,000 tons of corn during the current marketing season with 20 percent more or less at the buyer's option. Under the agreement, additional quantities may be made available by Thailand if the expected bumper crop materializes. No definite formula is specified for arriving at prices but the price of corn moving to Japan in the same month will be taken into consideration. Total shipments in the marketing year begun in September will likely be higher than in 1968/69.

Wheat: As a foreign exchange earner, wheat is of great importance to Australia, the only country exporting that commodity in the region. Since it is one of the world's largest exporters of wheat, Australia's shipments can significantly affect the overall world market situation. Australia's exports of wheat and flour during 1968/69 totaled 5.3 million tons, down 1.6 million from 1967/68. Under present world marketing conditions, there are doubts that its exports for 1969/70

will exceed 5 million tons. A buildup in carryover stocks to about 13 million tons is forecast for December 1, 1970, an increase of 85 percent over the 7-million-ton carryover estimated for December 1, 1969.

Rubber: World rubber prices have reached unexpectedly high levels in 1969. New York quotations, near 28 cents a pound in October 1969, have recently been the highest in almost a decade. They contrast sharply with a low of 16.5 cents in early 1968. Rising prices have been a great boon to Malaysia, which leads the world in the production and export of rubber. It is estimated that for every 1-cent rise in the price of rubber, Malaysia earns an additional $25 million in foreign exchange. Rubber exports totaled 591,000 tons during the first 6 months of 1969. This is 73,000 tons more than during the same period last year and 113,000 tons more than in the first half of 1967. Ceylon's exports of rubber for the first 6 months of 1969 rose to $38 million from $24 million a year earlier. Thailand has benefited significantly from higher rubber prices. Indonesia also has benefited since rubber represents a significant portion of total exports; however, production has been lower as many smallholders that abandoned the trade when prices were low have been slow in returning to rubber tapping.

Livestock Products: Exports of livestock products--meat, wool, and dairy products--are of great significance to the economies of Australia and New Zealand. Excluding dairy products, export demand and prices are up in 1969. New Zealand's wool production was only slightly higher, but improved prices for coarser wools resulted in an increase in the export value to $241 million for the year ended June 1969, 40 percent above the previous year. Meat continued as New Zealand's main export with shipments valued at $353 million in 1968/69. More than one-fourth of the total meat exports were consigned to the United States and were valued at about $96 million. Meat and wool accounted for about half the value of Australia's total exports to the United States in 1968/69.

New Zealand's dairy industry faces serious surplus problems at home and abroad, particularly for butter. The accumulation of stocks in European countries has led to depressed prices and difficult marketing conditions in the United Kingdom--New Zealand's main dairy products market. The total value of dairy exports declined by 18 percent to $213 million in 1967/68 and is reported down to $205 million in 1968/69.

Other Commodities: Export earnings from sugar may be lower in 1969/70. Drought has reduced the crop in the Philippines so much that the country may not fill its export quota to the United States. Export availabilities from Australia may also be lower as a result of the reduced sugar content of the cane there. Exports of jute and jute products should be up due to the large crops in India and Pakistan. Earnings from coconut products will be down in the Philippines owing to lower prices as well as drought-reduced production, and they are unlikely to show any significant increase in Indonesia, Ceylon, or other exporting countries of the region. Tea production and shipments are slightly higher this year. The value of Ceylon's tea exports for the first half of 1969 totaled $100 million, compared with $83 million for the same period a year earlier. Production and exports of fruits are gaining in importance in several countries. Afghanistan's total exports of fresh and dried fruits were valued at $26 million in 1967/68. Fresh fruit exports alone increased $8 million over a year earlier to $14 million. Excellent crops of grapes and stone fruits should result in Afghanistan's exporting more fresh fruits in 1969.

Imports

Japan is by far the most important importer of agricultural products in the region. India is second. Japan is the largest cash market in the world for U.S. farm products, and India represents the largest outlet for P.L. 480 sales.

Japan: Imports the first 7 months of 1969 totaled $8.3 billion or 10 percent above the same period of last year. Farm products which registered volume increases were wheat, up 9 percent; raw wool, 12 percent; soybeans, 2 percent; and grain sorghum, 15 percent. Imports of corn and soybeans were down 7 percent, while incoming cotton declined by 25 percent.

To fulfill consumption and minimum stock requirements, Japan likely will import about 4.4 million tons of wheat in 1969/70, about 6 percent above 1968/69. In August the Food Agency, which controls purchases of all imported wheat, announced that future Japanese purchases of foreign wheat would be on the basis of type–soft, semihard, and hard–rather than by country of origin as in the past. The United States has been supplying about half of Japan's wheat imports. However, under the present world wheat surplus situation, the United States faces increased competition in maintaining its historical share.

The rapidly growing poultry and livestock industries in Japan require ever larger imports of feedgrains. Total imports of corn in 1969 are estimated at 5.6 million tons, with the U.S. share about 3.4 million tons. Heavy imports of U.S. corn during the second half of 1969 are expected because of the favorable U.S. price of corn relative to grain sorghum, as well as the limited availability of corn from competitive sources. Japan's corn imports for industrial uses in 1969 are expected to reach 1.3 million tons. This compares with 1 million tons used in 1968. The increase results from a rising demand for starch. Japanese imports of grain sorghums are forecast at 2.7 million tons in 1969, compared to 2.3 million tons in 1968. The U.S. share likely will be about 1.6 tons, down from 1.9 million in 1968. This decline is due to expected imports of about 970,000 tons from Argentina. The Government of Japan is considering the use of about 1.1 million tons of surplus 1967-crop rice as feed for livestock. If this materializes, corn and grain sorghum imports may be somewhat lower than indicated.

Raw cotton imports for the 1968/69 marketing year ended July 31 are estimated at 682,000 tons, a decline of 11 percent from 1967/68. Imports from the United States during 1968/69 totaled 144,000 tons. This represents 21 percent of total imports against 30 percent last year. Comparatively higher prices for U.S. cotton, especially Arizona-California cottons, and the prolonged dockworkers' strike at Gulf ports were among the major factors leading to the decline in imports from the United States. Japan increased its takings of cotton from Mexico, Brazil, and the Soviet Union. These imports have been displacing U.S. medium staple cotton in the Japanese market. The U.S. Export-Import Bank in May 1969 authorized Japan a credit of $75 million to finance the import of 650,000 bales of U.S. raw cotton during the 1969/70 marketing year begun August 1.

Japan's major import of red meat is mutton. Imports of mutton from New Zealand in 1968 totaled 76,000 tons, compared with 16,000 tons in 1960. During that span, imports from Australia increased from 2,000 tons to 30,000. Fresh poultry imports totaled over 16,000 tons in 1968, double the 1967 level. The Japanese Government's import quota on beef and pork severely curtails meat imports and drastically restricts the amount available for consumption. The Japanese Government is faced with growing foreign pressures to liberalize these and other restrictions on agricultural imports.

The Ministry of Agriculture and Forestry announced in September that import controls on 22 agricultural commodities would be liberalized by the end of 1969. Among the important commodities affected are soybean meal, rapeseed meal, cake mixes, fresh apples, fruit purees, and pig fat. But import controls on grapefruit, beef, canned tomatoes, and certain other vegetable items which the United States has pressed the Japanese Government to liberalize were not listed.

India: India's total food grain imports in 1969/70 are expected to approximate 4.5 million tons, compared with 4.3 million tons in 1968/69 and 8.2 million tons in 1967/68. Wheat is the major food grain import, totaling 3.8 million tons in 1968/69. Some 2.6 million tons were imported from the United States, the rest largely from Canada, Argentina, and Australia. The United States is expected to supply about three-fourths of the 4 million tons of wheat planned for import in 1969/70; Canada will supply most of the remainder. Imports of U.S. grain sorghums are expected to total roughly 300,000 tons. This compares with total imports of only 55,000 tons in 1968/69 and 1.3 million tons in 1967/68. Imports of rice (milled basis) in 1969/70 will be higher and may exceed 500,000 tons. The increase is explained by the ever-growing demand in urban centers and larger supplies available at lower prices in nearby exporting countries. Burma is scheduled to export about 200,000 tons of rice to India in 1969. About 100,000 tons of U.S. rice was purchased under Title I of P.L. 480 in mid-1969. Other countries expected to ship rice to India in 1969/70 include Egypt, Thailand, and Cambodia.

India is scheduled to import about 650,000 bales of cotton from all sources in 1969/70, including over 200,000 bales from the United States under P.L. 480. The Sudan probably will supply about 190,000 bales. Imports of soybean oil from the United States under P.L. 480 are anticipated in 1969/70 to help meet the growing consumer demand for vegetable oils. Some imports into India of Russian sunflower oil and Ceylonese coconut oil are also expected. Prices for vegetable oils increased sharply in recent months, reflecting fast-growing consumer demand and the shortage of peanut oil due to the small 1968/69 harvest.

Pakistan Though still a major food grain importer, Pakistan has made progress toward reducing its food needs from abroad. Wheat imports fell to 756,000 tons in 1968/69 from 2.2 million tons the preceding year. The United States supplied 659,000 tons that moved mostly under P.L. 480, but 92,000 tons were commercial purchases. Almost all the wheat imported in 1968/69 went to East Pakistan. About 30,000 tons of rice came from Burma in the first quarter of 1969/70 to ease a shortage in East Pakistan. Vegetable oil imports may reach 150,000 tons in 1969/70 because of large purchases from the United States under P.L. 480. Commercial imports of tallow are increasing.

Ceylon: Ceylon's rice imports in 1969 are likely to be close to the 355,000 tons received in 1968. Its takings from mainland China may exceed the 200,000 tons delivered in 1968 because higher prices for rubber entitle Ceylon to more rice in the rubber-for-rice trade arrangement between the two countries. Imports of wheat flour in 1969 are expected to exceed 400,000 tons; about half of this should come from the United States, mostly under P.L. 480. About 25,000 tons of Australian wheat were imported in the first half of 1969 for the new flour mill in Colombo. Meanwhile, about 80,000 tons of Australian wheat flour arrived in Ceylon.

Taiwan: Imports of wheat into Taiwan in 1969 may exceed 600,000 tons, including 56,000 tons of feed wheat purchased from France in the first half of the year. Wheat imports in 1968 totaled 449,000 tons. Corn imports are continuing to expand rapidly and may reach 500,000 tons this year. This will, however, be less than earlier expectations, due to the purchase of low-priced

French feed wheat. Most corn imports so far in 1969 are from Thailand and the United States. Incoming raw cotton likely will match the 87,000 tons received in 1968. Imports of U.S. soybeans in 1969 might reach 610,000 tons, compared with 405,000 tons in 1968. Growing poultry, hog, and fishery industry needs for soybean meal have been the major factor in the rapid expansion in soybean imports. The Government of Taiwan has placed limits on imports of wheat, corn, and soybeans for the period April 1-December 1, 1969. Port congestion and the island's limited storage and transportation facilities made these restrictions necessary.

Korea: The 760,000 tons of rice (milled basis) programed for import by Korea in 1969 have mostly been received. The United States is supplying about 460,000 tons and Japan, the rest from its surplus stocks. Korea expected to import over 1 million tons of wheat in 1969, compared with 813,000 tons in 1968. Wheat comes largely from the United States, mostly under P.L. 480. Korea has increased its corn imports in 1969, largely to meet the needs of the rapidly expanding poultry industry. Cotton imports are expected to be around 81,000 tons, 5,000 tons less than in 1968. Imports in the first 6 months of 1969 totaled 37,000 tons. Sales of cotton to Korea under P.L. 480 amounted to only 35,000 tons in 1969, compared with 83,000 tons in 1968.

Hong Kong: Rice imports into Hong Kong in 1969 probably will total 300,000 tons, some 14,000 tons less than in 1968. Stocks on hand at the beginning of the year were unusually large, and per capita consumption is apparently showing a slight decline as diets are upgraded and diversified. There were no rice imports from the United States during the first half of 1969, largely because of lower prices for Thai rice and the availability of large quantities from mainland China. Thai prices have since advanced and the Crown Colony recently made additional purchases from the United States. Imports of wheat and wheat flour in 1969 will probably be close to the record 1968 level of 216,000 tons (wheat equivalent basis). In first half of 1969, Australia and Canada were the principal sources. The United States supplied only 7,000 tons during that period. Corn imports during the first 6 months of 1969 totaled 64,000 tons, with Thailand supplying 46,000 tons. The United States sent about 20,000 tons of mixed poultry feed during this period. Total imports of raw cotton in 1969 are estimated at 163,000 tons, 33,000 tons less than in 1968.

Philippines: Imports from the United States by the Philippines have dropped substantially in 1969, although the country's total imports have increased. In the agricultural sector, only imports of United States dairy products and tobacco registered gains in the first 5 months of 1969 The Philippines initiated a tough program to reduce its huge trade deficit in 1968, and reinforced it in 1969. The principal weapon is denial of credit for overseas purchase of items officially classified as nonessential. One of the earliest items so classified was wheat flour. In early September, Filipino flour millers reportedly were planning to reduce their multimillion dollar wheat purchases from the United States and to turn to Canada in the coming year for 150,000 tons under an agreement offering very liberal credit terms and renewable after a year.

South Vietnam: In recent years South Vietnam has become important as an importer of rice and other U.S. agricultural commodities. Some 322,000 tons of rice have been scheduled for import this year, all from the United States. This compares with total imports of 680,000 tons in 1968. Improved transportation and security, allowing South Vietnam wider use of its own production, were responsible for the lower volume of imports, despite the short 1968/69 crop. Corn imports are increasing to meet the needs of the growing poultry and swine industries. It is forecast that 150,000 tons of corn will be imported for feed in 1970, compared with estimated imports in 1969 of approximately 80,000 tons and only about 25,000 tons in 1967.

South Pacific Islands: Over the past 5 years, the islands of the South Pacific from French Polynesia to New Guinea, between the Tropic of Capricorn and the Equator, have more than doubled their imports of agricultural products. Imports of poultry meat have gone up about 3½ times; the largest gain is in French Polynesia.

Of the approximately $80 million worth of agricultural products being imported, cereals account for about 25 percent; meats, 22 percent; fruits and vegetables, 13 percent; beverages, 11 percent; and dairy products and eggs, 10 percent.

The U.S. share of the area's agricultural imports is nearly 10 percent. The largest island market for U.S. products is French Polynesia where the U.S. share is 25 percent. Smallest markets for U.S. products are the Territories of Papua and New Guinea; combined imports there from the United States amount to about 2 percent of total agricultural imports.

Other Countries: With more spindles to be in operation in Thailand and a sharp drop in cotton production likely in 1969/70, Thai imports of raw cotton are expected to be more than double the 1968/69 level of 17,000 tons. In recent years, U.S. share of that Nation's cotton imports was about 80 percent. As the result of a good crop, Indonesia is expected to reduce its rice imports in 1969 to about 500,000 tons from around 600,000 tons a year earlier. Due to some decline in production in 1969, Afghanistan might purchase 90,000 tons of wheat from the United States under P.L. 480 in 1969/70 and additional quantities from Australia and the Soviet Union. This compares with total imports in 1968/69 of roughly 40,000 tons from the Soviet Union, Canada, and Australia.

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A Framework for Analysis of Agricultural Marketing Systems in Developing Countries

By Norris T. Pritchard

Many developing countries urgently need improvements in their agricultural marketing systems to keep pace with expansion in agriculture and industry. The changes in technology, consumer demand for farm products, farmer demand for farm supplies, and the growing interdependence of farming and marketing during development are other stimuli for modernization. Although modernization and expansion of agricultural marketing systems are now underway in developing countries, progress generally is slow. It is visible mainly as small, but important, islands of modern marketing in the midst of now antiquated systems inherited from past generations.

Accordingly, many developing countries are eager to hasten expansion and change in their agricultural marketing systems. But to formulate effective improvement programs they need comprehensive economic analyses of agricultural marketing in the context of economic growth, as well as studies of specific marketing operations. The purpose of this paper is to outline some of the broad elements in such an analytical framework. A total-systems research approach can help policy and program officials identify present and emerging marketing problems and to understand the intricate, changing linkages binding agriculture and marketing together. It will further aid in setting policy priorities, selecting areas for specific action, and hastening agricultural and general economic development.

The Research Framework

A comprehensive analysis of agricultural marketing systems requires a broad analytical framework to supply essential operational research questions and to indicate appropriate research methods. A key element in this construction is the theory of market structure-conduct-performance analysis, using a broad definition of structure. A second major part of the framework is a set of widely known economic theories relevant to marketing. These include the principles of consumption, demand, production, economies of scale, pricing, marketing information, firm behavior, and business management. A third key feature is the theory of effective competition as a dynamic process. A fourth major element is the general theory of economic growth. Growth concepts are especially important because the research, by definition, encompasses agricultural marketing in growing economies now in early stages of development. The main thread binding the theories into a useful framework is the concept of agricultural marketing as an organized, operating behavior system within the national economy. Completion of the analytical framework further requires definition of agricultural marketing, and recognition of basic economic, technological, and social restraints in the environment in which marketing systems function and change.

Definition of Agricultural Marketing

Agricultural marketing is defined here as agriculturally oriented marketing. It embraces all operations and institutions involved in moving farm products from farms to consumers, in providing production and consumption incentives to producers, marketing firms, and consumers, and in distributing farm supplies--feed, seed, fuel, fertilizer, and machinery--to

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farmers. Thus, agricultural marketing covers assembling, transporting, processing, storing, packaging, wholesaling, financing, retailing, market information, pricing, market organization, competitive relationships, bargaining, selling, procurement, product and process innovation, and exporting of products of farm origin. It also covers the similar counterflow of farm supplies to farmers. Accordingly, this concept of agricultural marketing embraces the whole of the food, feed, seed, and livestock industries. However, for such other agriculturally oriented industries as textiles, tobacco, chemicals, and farm machinery, the need for holding the research program to manageable size requires restriction of the concept to those marketing operations that involve these other industries in direct contact with farmers as first sellers or final buyers.

Market Structure Analysis

For a comprehensive analysis of agricultural marketing systems in the context of economic growth, market structure analysis is a valuable, but often neglected, research tool.[1] Whereas much of economic theory abstracts from marketing, market structure analysis postulates causal relations running from industry and market structure through the conduct of marketing firms to their performance, and, at times, from performance back to structure.[2] Market structure analysis is problem oriented. It may be positive or predictive in purpose and either static or dynamic in nature. It is compatible with other economic theory and, in empirical studies, either a broad or a narrow concept of structure may be used. These are important advantages of the theory for studies of marketing in developing countries where (a) industry and market structures are changing and (b) governments are seeking to improve market performance by making specific changes in market organization.

In recent years, market structure has become more and more narrowly defined as "those characteristics of the organization of a market that seem to influence strategically the nature of competition and pricing within the market."[3] The strategic characteristics most emphasized are the degree of seller (buyer) concentration as measured by numbers and size distributions of firms, the degree of product and service differentiation among sellers, and the conditions of entry into an industry and its markets.[4] This narrow concept of market structure, however, seems unsatisfactory for agricultural marketing studies in developing countries. The emphasis on only three of the many elements of market structure influencing conduct and performance reflects a consensus on the critical policy issues in marketing in advanced market economies. Indirectly, it suggests that acceptable solutions have been found for the many excluded, more elementary, structural problems of these highly developed marketing systems.[5] But in developing countries, agricultural marketing, like almost everything else, is in early stages of development. The important structural problems are often not well known. They are more numerous, and more elementary. For example, development of a system of uniform weights and measures and a body of law on contracts and business organization may have far more importance for market performance than action to reduce market concentration in economies with fragmented market structures. Also, the limited degree of product differentiation in a developing economy, with its limited outputs of goods and low effective demand, may be less important than deficiencies in structure that reduce productivity.

Although market structure analysis becomes more difficult and complex as the definition of

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[1] W. F. Mueller. Some Market Structure Considerations in Economic Development. Jour. Farm Econ. 41(2), May 1959.

[2] J. S. Bain. Industrial Organization. John Wiley and Sons, New York, 1959. Also R. L. Clodius and W. F. Mueller. Market Structure Analysis as an Orientation for Research in Agricultural Economics. Jour. Farm Econ. 43(3), August 1961.

[3] J. S. Bain. Barriers to New Competition. Harvard Univ. Press, Cambridge, 1962, p. 7.

[4] Clodius and Mueller, op. cit.

[5] A few examples of these excluded structural elements include the many organizational variables often referred to as "rules of the game," set by law and business custom; formal and informal contractual arrangements among business firms; the structures of closely related industries such as agriculture; and some basic economic and technological features of products and processes. In all cases, the key requirement is significant influence on business behavior and performance.

structure is broadened, there are offsetting advantages. Chief among these is improvement in the odds for correctly identifying urgent and emerging structure-performance problems and determining causal relationships. These are essential first steps to finding practical means for improving market structures and performance.

Market conduct is "the patterns of behavior that enterprises follow" in marketing.[6] Conduct is what businesses do; it is their policies and strategies. Market performance is the results of market conduct. These include prices, profits and losses, product and service volumes and qualities, product innovation, technical and economic progress, diffusion of benefits of progress, and other events. In market structure analysis these performance variables are related to observed conduct and structural variables to determine lines of causation.[7] The next step, with great interest for developing countries, is estimation of potential improvements in industry and market performance resulting from a specific change in structure, such as a new food processing plant, an improved system of weights and measures, new grading standards, or land reform in agriculture.

Relevant Economic Theory

Agricultural marketing has no distinct body of theory of its own. Therefore, analytical frameworks for marketing studies are sets of relevant theories drawn from general economics.[8] These include the well-known theories of consumer demand, production, pricing, farmer demand for inputs, market information, behavior of the firm, innovation, storage, transportation, competition, countervailing power, and others. Among these, the theories of consumer and farmer demand for farm products, inputs, and marketing services are especially useful for explaining and predicting how and why the structures of these demands change during development.[9] The theory of production is important since most marketing operations involve the production of goods and services. They require inputs of productive factors. With technological advance in marketing, rising wages, and increases in market size during development, analyses of economies of scale and changes in substitution relationships among productive factors acquire great importance in marketing studies. Economic-engineering analyses, based on the theories of production, firm behavior, and demand, are particularly valuable for estimating the feasibility of the new marketing facilities needed for modernization of agricultural marketing systems in developing countries.

From national income accounting and input-output analysis come useful concepts and information for study of a major growth phenomenon. This is the changing structure of linkages among agriculture, marketing, and other economic sectors. Increasing interdependence of economic sectors, such as agriculture and marketing, is a hallmark of economic development. Other useful economic concepts may be drawn from welfare theory, macroeconomic analysis, and the theory of international trade.

Finally, useful analogies may be drawn from the history of agriculture and agricultural marketing in the developed countries. By current standards all of these countries once were seriously underdeveloped. They also were predominantly agricultural until quite recently.[10] Moreover, some of the advanced

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[6] Bain, op. cit., p. 9.

[7] In practice, it is often both difficult and unnecessary to distinguish between conduct and performance. In these cases, market structure analysis seeks to determine direct structure-performance relationships. Frequently, too, the nature of the conduct variable is obvious from the performance. For example, a firm that markets many new products probably has a strategy of product innovation and a substantial product research and development program. Similarly, it may be as difficult as it is unimportant to distinguish sharply between a market strategy of low prices and the prices.

[8] Relevance is largely determined by the economic functions performed in a marketing system, the nature of the specific marketing problem under study, and the economic forces and restraints in agricultural markets.

[9] The static nature of the theory is a complicating factor but does not bar its use.

[10] P. T. Bauer and B. S. Yamey. The Economics of Under-Developed Countries. Nisbet and Co., Herts, England, 1963, p. 47.

countries have current growth rates and potentials for future growth so high that they may in this sense be considered relatively undeveloped countries.[11]

Concepts of Effective Competition

The theory of effective competition as a dynamic process is a third major element of the analytical framework.[12] For comprehensive analyses of agricultural marketing systems in developing economies it has several advantages. Its basic assumptions are more realistic than those of pure competition. As a result, they provide more useful, although less precise, guidelines for empirical study. Unlike the theory of pure competition, the theory of effective competition attempts to establish attainable, as well as desirable, standards of industry and market performance. In view of the high importance of improving market performance in developing countries this realism has great value for researchers, policy officials, and others. Furthermore, it enhances the usefulness of market structure analysis with which the theory of effective competition is highly compatible.[13] Another advantage of the theory is that it expressly allows for dynamic economic conditions by viewing competition as a dynamic process rather than as a static, equilibrium-seeking activity. The main disadvantage of the theory of effective competition as a guide to empirical research is its lack of refinement and precision. Its main principles cannot be expressed in the language of mathematics. As a result, quantitatively precise research results are not easily generated. Nevertheless, in the resulting choice between more realism with less precision and the opposite, pragmatism strongly favors realism.

Theory of Economic Growth

Economic growth is a major national goal in all countries and a significant fact of modern life. It may be defined as a significant, sustained increase in real output per capita, or in total, as measured in national income accounts.[14] Growth always involves sweeping changes in technology, economic and social institutions, structures of production, industries, markets and demand, and modes of life and work.[15] Significant increases in real output per capita are on the order of 15 percent, and more, per decade. Sustained growth is expansion of real outputs and consumption over long time periods, usually several decades, with allowance for short-run variations in rates.[16]

In recent decades, many attempts have been made to develop mathematical models of the growth process. So far, however, the models are not particularly useful for empirical studies of development. Most are far too simple in design, with only one or two independent variables, for a process as complex as economic growth. More importantly, the basic assumptions built into the models have little relevance to the real world.[17] As a result, the research

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[11] Students of marketing are also aware that useful insights on marketing systems and operations can be gained from several other disciplines. These include geography, political science, philosophy, sociology, anthropology, and social psychology. Economics, of course, remains the foremost discipline necessary for marketing studies, including comparative analyses of marketing systems. See: David Carson. International Marketing: A Comparative System Approach. John Wiley and Sons, New York, 1967. p. 495.

[12] For a detailed discussion of the theoretical concepts see: J. M. Clark. Competition as a Dynamic Process. The Brookings Institution, Washington, D.C., 1961.

[13] Clodius and Mueller, op. cit.

[14] Simon Kuznets. Modern Economic Growth. Yale Univ. Press, London, 1966.

[15] The increases in population that usually accompany economic growth probably are not an essential condition.

[16] National income accounting generally understates true increases in levels of living during growth. No values can be given to the increases in leisure time, the reduced drudgery of work, the greater economic freedom provided by rising incomes, and the improvements in product quality, health, and nutrition not fully reflected in their costs.

[17] F. H. Han and R. C. O. Matthews. The Theory of Economic Growth: A Survey. Surveys of Economic Theory, vol. II, Macmillan Co., New York, 1966. The authors reviewed growth models developed since the late 1930's. More specifically, Schultz writes: "... growth economists have been producing an abundant crop of macro-models that are ... neither relevant ... nor useful in examining the empirical behavior of agriculture as a source of growth." T. W. Schultz. Transforming Traditional Agriculture. Yale Univ. Press, New Haven, 1964.

economist must be content with some qualitative concepts of the development process.

Economic growth has many origins. The obvious sources are increases in the supply of productive resources--labor, land, and investments in human and physical capital. But in most countries, the primary source of economic growth per capita is improvements in the quality of resources.[18] Quality means efficiency in terms of output per unit of input. Increases in efficiency come mainly from technological advance in production, marketing, and business management, from improvements in resource use through changes in industry structure, and from increases in scale of economic units. Scientific research, education, and communication are the foundation of technological advance. Indeed, a hallmark of modern economic growth is the increasing application of science and technology to production, marketing, and business management. Increases in scale of economic units are made both necessary and possible by advances in technology and in the economic size of markets. Changes in industry structure that increase efficiency include transfer of labor out of agriculture, increases in the size of businesses, and decreases in most types of self-employment.

Economic growth is a pervasive force. This is assured by intricate economic linkages among sectors and industries, by the nearly universal nature of science, knowledge, technology, and management, and by other socioeconomic forces. Except in primitive societies, all economic sectors are so interdependent that a change originating in one, sooner or later, induces changes in others. For example, an increase in farm outputs usually expands volumes of products moving through marketing channels. This affects costs, prices, incomes, and employment in assembly, processing, transportation, and distribution. There are also third and fourth order impacts on suppliers of fuel, packaging materials, and capital goods.

Improvements in the quality of the products of one industry often increase efficiency in others, especially when the outputs of one are the inputs of others. Examples include the farm and food machinery industries, transportation, communication, business machines, packaging, and others. The "spin-off" of civilian products and processes from military and space research has received much publicity. Moreover, as economic growth moves the economy toward ever more specialization and commercialization, the interdependence of economic sectors and the pervasiveness of growth forces become more intense. Increasing interdependence during growth is especially pronounced in agriculture and agricultural marketing.[19]

In a growing economy, consumer demand rises and its structure changes significantly. Pronounced shifts in consumer expenditure patterns result mainly from important differences in income elasticities of demand for different goods and services.[20] For example, food expenditures, even in low income countries, rise in value but fall as a share of consumer incomes because of generally low income elasticities of food demand. Among foods, income elasticity differences promote continuing change in food consumption patterns. Also during growth there is an expansion of knowledge which brings an awareness of new things and new concepts of living. New products give consumers more consumption alternatives and the growing economy becomes increasingly market oriented. These changes have high significance for agriculture, agricultural marketing, and national policy for food and agriculture.

On the supply side, economic growth is marked by significant increases in the economy's productive capacity and by equally important changes in the structure of production, industries, and markets. Technological advance provides more efficient production and marketing processes and new products. These are needed to satisfy consumer demand for greater diversity in consumption and to stimulate demand enough to assure full use of the economy's

[18] E. F. Denison. Why Growth Rates Differ. The Brookings Institution, Washington, D.C., 1967.

[19] A. R. Ayazi. Interrelationships Between Agriculture and Other Sectors and Their Implications in Terms of Planning. FAO, Monthly Bul. Agr. Econ. and Statis., October 1968, Rome, p. 1-9.

[20] Price elasticities among different goods and services also vary greatly. During growth technological progress and rising wages alter relative production and marketing costs and prices of most things. Thus, price elasticities may accentuate, or offset, income effects on consumption.

expanding capacity to produce. Most new technology reduces the need for unskilled labor, raises demands for skilled workers, scientists, and executives, decreases the drudgery of work, and permits real wages to rise. It makes old plants and equipment obsolete, increases capital investments per worker, raises the scale of producing and marketing units, increases the share of fixed costs in the cost structures of most firms, makes production and marketing more complex, and lengthens production planning periods. Numbers of large production and marketing organizations increase while many small, family enterprises disappear.

Emphasis on marketing increases in growing economies. Profitable utilization of larger producing and distributing units depends on high sales volumes. Accordingly, marketing firms have increasing need for influencing consumer behavior and for control over supplies of basic products. Farmers come under increasing pressure to improve delivery schedules and the level and uniformity of quality of outputs. The multiple, circular flows of goods, services, and credits linking agriculture, agricultural marketing and other sectors become stronger and more complex during growth. There are also rising pressures on national governments for effective policies of full employment and economic stability to maintain consumer purchasing power, enterprise profits, and a satisfactory rate of economic growth. Growth further stimulates urbanization of the population, places greater demands on capital and product markets, and induces significant changes in educational and political institutions and in ways of living.[21]

Special Conditions in Agriculture

The facts of economic development differ markedly among countries, regions, and economic sectors but the fundamental nature of the growth process is universal. The basic socioeconomic trends in all growing economies are strikingly similar.[22] These facts largely explain the absence of special theories of growth for agriculture, marketing, and economies in early stages of development.[23] Nevertheless, there are important practical reasons for considering the development of agriculture and agricultural marketing as distinct fields of study linked to the study of economic growth.

First, agriculture in nearly all countries is the largest industry. In developing countries this superiority is overwhelming. In many, agriculture requires more than half of the total labor force and food expenditures are more than half of all consumer expenditures. Much of industry and commerce is strongly oriented to agriculture as a source of raw materials and as a market for manufactured products. For example, in most developing countries, from half to two-thirds of all manufacturing involves the processing of farm products.[24] Commerce probably is even more dependent on agriculture. Thus, the development of agriculture and its marketing system, in developing countries, is at the heart of the growth process.

Second, agricultural production is almost exclusively a biological process. From this fact flows a variety of special technological, educational, and economic problems important to agricultural and marketing development. Third, most farm products are subject to much lower income and price elasticities of demand than most nonfarm products and services. Accordingly, general economic growth means that a declining share of the national income is spent for food and that the share of the gross domestic product originating in agriculture falls. From this comes the necessity to transfer resources, especially labor, out of agriculture. Fourth, this essential outmigration of people is fraught with more complexities, hardships, and restraints of an economic, technical, educational, social, and political nature than those prevailing in most nonfarm sectors of the economy. Finally, agriculture, more than any other economic sector, is the bastion of small-scale, family enterprise. This has much importance for methods and problems of stimulating and

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21 Kuznets, op. cit. Clark, op. cit. Also: J. K. Galbraith. The New Industrial State. Houghton Mifflin Co., Boston, 1967.

22 The growing volume of literature on agricultural development and general economic growth continues to confirm this universality.

23 "There are no special economic theories or method of analysis fashioned uniquely for the study of the under developed world." Bauer and Yamey, op. cit., p. 8.

24 FAO. Agriculture and Industrialization. The State of Food and Agriculture 1966, Rome, 1967. pp. 75-121.

sustaining growth and adjustment in agriculture and marketing.

The Functionally Complete Structure

At this point the research framework lacks the appearance of the functionally complete theoretical structure that is desired. It seems more like a collection of essential building materials and tools that clearly are relevant to analysis of agricultural marketing systems and operations in developing countries. Relevance, however, is one of the basic tests of a useful theory. The other requirement is enough consistency among the several elements of the framework to provide, in a practical sense, a coordinated, if not actually an integrated, analytical framework.[25] This essential coordination is provided by several strong threads that, although not immediately obvious, link the several theories into a loosely fitted, but workable, research framework.

First, there is the economist's basic concept of the economy as an organized, operating behavior system. Agricultural marketing, as defined above, is an important subsystem in the economy. Like all operating systems it has institutions, participants, functions, inputs, outputs, behavior patterns, and complex linkages among the variables. This concept of a functioning system in the process of growth naturally leads to substantial synthesis of the principles of growth, changing structure-conduct-performance relationships, dynamic competition, and changing inputs, outputs, functions, and technology.[26] That is, the basic concept of agricultural marketing as a functioning system provides needed unity to the research framework and, therefore, to the empirical research it serves as an analytical tool.

Second, there is the coordination provided by the primary purpose of the research and its pragmatic orientation. The research is concerned with identifying and evaluating practical means of modernizing (improving) functioning agricultural marketing systems in developing countries to meet their needs for expansion coupled with higher performance. The sole purpose of the analytical framework is to provide useful guidelines to empirical study. Accordingly, in practice, the purpose and orientation of the analytical framework and the research provide much needed unity of direction and content.

Finally, the principal elements of the theoretical structure have substantial mutual compatibility. Therefore, they are easily fitted together provided that the requirement for consistency is not applied too rigorously. For example, market structure analysis is easily harnessed with growth theory in developing useful research questions about the nature of the structural changes required in agricultural markets to promote growth and improved performance. The theory of effective competition as a dynamic process is closely related to, and even incorporates aspects of, market structure and growth theory. Even the normally static theories of consumer demand, production, price, and firm behavior can be used, with some difficulty, in harness with the other theoretical elements to provide useful research questions. In short, it seems evident that the set of relevant economic theories described briefly in this paper forms a loosely fitted, but functional, analytical framework for empirical study of agricultural marketing systems and operations in developing countries.

Some Further Observations

There are several reasons for thinking that the need for an analytical framework for study of agricultural marketing systems and operations may be even more urgent in developing than in advanced countries. These reasons include the more limited knowledge of marketing in developing countries, severe deficiencies in essential statistics, a paucity of published research, higher costs of conducting research, and more urgency for finding practical means of promoting improved marketing performance. For the marketing expert from a developed country the wide gulf between the system that is

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[25] Wroe Alderson, Marketing Behavior and Executive Action, Richard D. Irvin, Homewood, Ill., 1957. . I.

[26] Ibid.

familiar to him and one in early stages of development is another compelling reason for an analytical framework that emphasizes basic theory. These factors, moreover, have significant impacts on the nature of the research approach and program and on research techniques.

Because so little is known about agricultural marketing systems and operations in most developing countries the first need is to describe accurately and meaningfully the systems that exist. Description must precede essential evaluation of marketing structures and performance, major forces responsible for changing structure-performance relationships during development, the changing strategic role of marketing during growth, the impacts of development on marketing, and related factors. These analyses are required for identification and evaluation of priorities among marketing problems and for subsequent determination of practical means for improving agricultural marketing systems and operations.

Given these research requirements, the limitations on essential information, and the qualitative nature of some key variables in marketing, much reliance must be put on description as the main research method. Descriptive research, unfortunately, has a strong tendency to be superficial although the need clearly is for analytical description. The difference is substantial. Analytical description is description at its best--rigorous and firmly grounded on, and guided by, relevant economic theory. That is, analytical description requires a carefully constructed theoretical framework.

For the marketing researcher from a developed country responsible for analysis of agricultural marketing in developing countries an analytical framework seems indispensable. There is a wide gap separating marketing systems in early stages of development and the complex, sophisticated system he knows so well. Many familiar landmarks, the historical record, and the large body of completed research are generally absent. The developing marketing system functions in a different environment, must meet different standards of performance, and may be faced with rather elementary problems. These problems may even be unfamiliar to this marketing expert because they were reasonably well solved in his native land long before he began his career. As agricultural production experts have learned, the conditions and problem of a developing country's agriculture often differ so much from those in other developing and advanced countries that common ground is not established without returning to elementary principles. The difficulties of transferring marketing institutions, methods, and experience from one country to another generally are conceded to be even greater than those of transferring farming methods. Accordingly, research must start from a firm foundation of relevant theory. It is an incomplete, but essential, chart for sailing in unfamiliar waters. Later, as empirical studies develop essential statistics, other descriptive information, and analyses of marketing in developing countries, the research framework can be more explicit, complete, and otherwise improved.

Finally, analytical description is by no means the only suitable research technique for these analyses. Analysis of the marketing problems identified in the early stages of the studies may require, at one time or another, the whole range of research tools economists employ, including economic-engineering and econometric studies. But regardless of method, the major objective remains unchanged. It is to determine practical means of improving agricultural marketing structures and performance in developing countries in the larger interest of accelerating agricultural, marketing, and total economic development.

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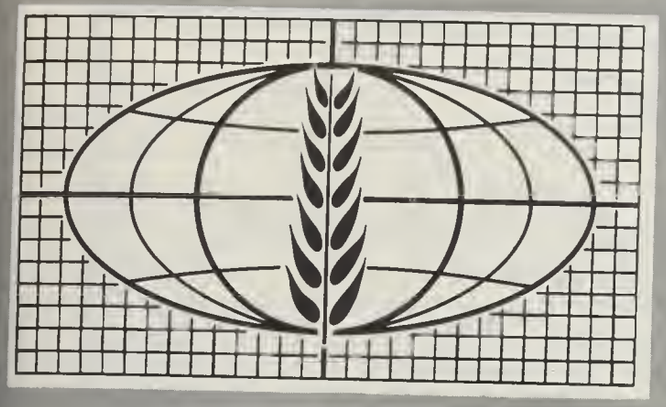

CONGO'S AGRICULTURAL ECONOMY IN BRIEF

By Fred Degiorgio

ERS-FOREIGN 282 FOREIGN REGIONAL ANALYSIS DIVISION SEPTEMBER 1969

SUMMARY

The Democratic Republic of the Congo (Kinshasa) is gaining momentum in its economic recovery from the turmoil following independence from Belgium in 1960. Civil and political disorders had reduced total agricultural production about one-fourth from the 1959 high to the 1965 low. Since 1965, production has slowly recovered. This recovery can be attributed to political stability and gradual restoration of internal security, plus monetary reform in June 1967 (primarily devaluation), which increased incentives to produce and export.

AGRICULTURE'S POSITION IN THE CONGOLESE ECONOMY

In 1958, nearly 31 percent of the Congo's gross domestic product was agricultural; in 1966, the proportion was 22 percent. With the decline in agriculture's relative importance, the nature of production also changed. Subsistence agriculture accounted for 35 percent of total agricultural production in 1959, but its share had increased to 52 percent by 1966. This occurred as many Congolese farmers, who had been marketing surplus production, reverted to subsistence production because the insecurity caused by the civil wars and the deterioration of the transport network made marketing of cash and surplus crops difficult. The collapse of government agricultural services also was a factor. To a smaller degree, these conditions were also responsible for a decline in production of market-oriented plantation and European estate agriculture. With the advent of internal security, market production is increasing on Congolese farms and on plantations and estates.

OVERALL ECONOMY

The Congolese economy is well diversified, compared with the economies of other African countries. Industrial processing and manufacturing accounted for 17 percent of total GDP in 1964. Subsistence agriculture, public administration, commerce, and transportation shared approximately equal parts of 45 percent of the total. Commercial agriculture and mining accounted for 13 percent and 7 percent.

In recent years, the country has become increasingly dependent on extracting and exporting its vast store of minerals, particularly copper. Mineral extraction remained practically untouched by the postindependence disorders and has been, by far, the prime earner of foreign exchange in the 1960's as

Figure 1

agricultural exports have declined. In 1966, about 26 percent of GDP came from exports. Mineral products accounted for 83 percent of exports, compared with 60 percent in 1958. Copper alone accounted for 57 percent of total exports in 1966. Other major mineral exports are cobalt, zinc, tin ore, gold, and industrial diamonds. Agricultural exports dropped from 40 percent of total exports in 1958 to about 18 percent in 1968. Palm products were the main agricultural exports in both periods.

THE PEOPLE

The population of the Congo--17.4 million in 1969--is growing at a rate of 2.3 percent a year. Overall density is 19 persons per square mile, but many large areas in the Katanga, Equateur, and Orientale Provinces remain very thinly populat The eastern highlands and Lower Congo hav the highest population densities. Kinshas (formerly Leopoldville) is the largest ci by far, with an estimated population of 1.2 million in 1968. Lubumbashi (formerl Elizabethville) is next largest, with 225,000 inhabitants. Mbyi-Maye, with 200,000, and Kisangani (formerly Stanleyville), with 100,000, follow. About 30 per cent of the population is urban, and the proportion is increasing as rural migrati to the cities continues.

LAND CHARACTERISTICS

The Congo is situated in the heart of tropical Africa and is about one-third the size of the United States.

About two-thirds of the Congo lies south of the Equator and one-third, north. A large tropical rain forest straddles the Equator, with precipitation there ranging from about 50 to 80 inches a year. Tropical savanna covers most of the remainder of the country except for the zones of tropical highland climate along the eastern margins.

Poor soils, mainly latosols, predominate throughout the Congo. Some alluvials in the central basin and volcanic ash lands in Kivu Province are more suitable for farming.

About half the land is classified as arable. In 1956, the latest year for which data are available, only about 1.2 percent was under cultivation in annual field crops and tree crops. Forests cover about 49 percent of the land, permanent pasture about 1 percent, and mountains, sandy areas, and swamps the remainder.

The Congo is almost entirely within the drainage system of the Congo River. The river encircles the terraced plateaus and plains of the large Central Congo Basin, which has an average altitude of 1,300 feet. Rising around the rim of the basin are plateaus and hills that contain much of the country's mineral wealth. Mountains ranging between 6,500 and 13,000 feet high follow the eastern border and then descend toward the Great African Rift lake system.

The Congo River has 1,700 miles of navigable waterways. The whole Congo Basin system totals about 7,200 miles of such waterways. These are the most important means of transport in interior areas where travel is otherwise impossible. The river system is estimated to have about 16 percent of the world's total hydroelectric potential. The Congo River flows into the Atlantic Ocean through a 25-mile strip of land which is the Congo's only boundary on the sea. The port of Matadi, 80 miles upstream from the mouth of the Congo, is the country's only important seaport.

The 3,125 miles of rail lines and 37,500 miles of roads complement the river transport system. The rail system serves to bypass unnavigable portions of the rivers, and the roads act as feeder lines for both rail and river transport. After independence, the transportation system fell into serious disrepair. Poor transportation remains one of the principal obstacles to economic recovery.

AGRICULTURAL STRUCTURE AND TECHNOLOGY

Shifting cultivation is the typical method of farming for native Congolese. Permanent open cultivation of a tract of land as practiced in the temperate zones seems unsuitable to most of the Congo, since the tropical sun and torrential rains quickly leach the soil of nutrients. In shifting cultivation, the Congolese farmer clears a small tract of land (no more than 2 or 3 acres) in the forest or savanna. Subsistence crops planted include cassava, corn, plantains, and sweetpotatoes. For cash, the Congolese farmer may produce palm oil and kernels, coffee, cotton, cocoa, tea, bananas, and pyrethrum. Intercropping is widely practiced. A few chickens, goats, sheep, and hogs may also be kept. After the fertility of the land drops, brush or trees are allowed to grow, and the farmer moves on to other forest or savanna land. In the high altitude areas of the eastern Congo, the Congolese farmer is predominantly a cattle herdsman instead of crop producer.

There is a distinct division of labor between men and women on the typical Congolese farm. The men fell trees, clear fields, harvest certain crops such as palm fruit and bananas, build huts, make beer and palm wine, hunt, and fish. The women prepare the fields, plant, cultivate, and harvest most crops. Women also do all household work along with preparing items for sale, taking products to market, and bringing purchases back.

The Congolese farmer uses only simple tools--axes, machetes, hoes, and other hand implements. Horses, mules, oxen, or donkeys are rarely used, and little, if any, fertilizer, insecticides, or fungicides are available to him.

The paysannat system (a land settlement plan) was introduced by the Belgians in the 1930's to increase yields and production, settle the rural population, improve living standards, maintain soil fertility, and

promote better farming techniques. The Congolese were organized into the paysannats under close supervision of government agronomists. Careful investigations were made of soil fertility, crop rotations, local customs, and economic needs before a paysannat was established.

The plan adapts the traditional native bush-fallow method of land use to the corridor system in the forest areas and the strip system in the savanna region. The corridor system alternates corridors of cultivated land with corridors of bush or forest fallow. The corridors of fallow land are maintained 15 to 20 years. The strip system consists of alternating strips of cultivated land and grass fallow.

By 1957, 175,000 Congolese farmers were organized into 200 paysannats covering roughly 3.7 million acres; over one-third of the paysannats were in Orientale Province. Most paysannats were devoted to production of food crops and cotton.

Before independence, the system had been proving successful; in 1956, with less than one-tenth of the rural population organized under the Paysannat Settlement Plan, the paysannats produced 27 percent of the total cotton, 22 percent of the rice, and 15 percent of the corn and peanuts. Since independence, however, most of the paysannats have disintegrated because of lack of supervisory personnel and government extension services and disruption of marketing channels. The regimentation of the system had always been unattractive to the Congolese.

In sharp contrast to Congolese farms are the plantations. Many are owned and operated by individual Europeans, but the largest are owned by corporations. Many individual European farmers left the Congo during the disorders following independence. Plantation crops include oil palms, coffee, rubber, cocoa, and tea. The large plantation holdings utilize some tractors for cultivation and other mechanization but rely heavily on Congolese laborers. Some fertilizer is used, largely for oil palms. Crop yields on plantations are two to 10 times those on indigenous farms.

AGRICULTURAL PRODUCTION

Export Crops

Palm products, coffee, and rubber are the main agricultural exports. Tea and cocoa beans are also export crops, but of lesser importance.

Palm products--palm oil, palm kernel oil, and palm kernel cake--are the Congo's most important agricultural export commodities. Production has been gradually recovering from 1965 lows but remains about 30 percent below the 1959 level. For production to reach preindependence levels, new plantings will be necessary. Low world prices for palm products in recent years have reduced incentives for plantations to increase production and for Congolese to harvest wild fruit. About 80 percent of production comes from plantations, where the crop is collected and marketed by CONGOPALM, a cooperative for the plantations. An increasing proportion of palm products has been diverted to domestic use in recent years for the manufacture of soap, margarine, and cooking oils.

The second most important export crop is coffee. The main variety is Robusta, but Arabica is also grown. Robusta is graded and certified by the "Office de Cafe Robusta" (OCR), but marketing is undertaken by private companies and by CAFECONGO, a producer cooperative. Coffee is grown in the northeastern and eastern highland sections of the country, where 80 percent of the production comes from plantations. Recent increases in production have resulted from the return to production of many plantations abandoned during the disorders.

Rubber is produced largely on 10 plantations in the northwest part of the Congo, but some is obtained from Congolese who tap trees outside plantations. Rubber production was cut in half by the civil disorders but is now making a gradual recovery.

Crops for Domestic Consumption

The main food crops (cassava, plantains, sweetpotatoes, and corn) of the subsistence farmer have risen in production

from low points in the early sixties to levels almost equal to those prevailing before independence. With the repair of roads and addition of trucks, more of these foods will enter domestic markets.

Before independence in 1960, cotton was an important export crop and the main cash crop of the paysannat system. As the system broke down during the civil disorders, cotton production fell drastically. Since 1965, cotton has been imported to supply domestic mills. With the return of internal security, however, cotton production is increasing. The 1969 crop may be near to supplying all the mills' current needs.

Livestock

Cattle are kept by Congolese herdsmen and by European ranchers. Livestock keeping by Congolese is concentrated in Kivu and Orientale Provinces. Tsetse fly infestation limits cattle production in many forested areas of the Congo. Prior to independence, European ranchers supplied approximately 50 percent of the meat marketed in the country. These ranchers are mainly in the Kongo-Central and Katanga Provinces, where herds of the large corporations may number 20,000 to 30,000 head. In 1959, there were about 1 million head of cattle, 350,000 hogs, 65,000 sheep and over 2 million goats. Livestock numbers declined sharply during the early sixties because of the disruptions.

Domestic demand for meat products is growing; in 1966, over 18,000 tons of meat and meat products were imported. Projects have been initiated to assist Congolese in Kongo-Central in starting livestock herds.

AGRICULTURAL POLICY AND DEVELOPMENT

A goal of the Government is to return agricultural production to preindependence levels. Table 1 production indexes show 1968 estimated total agricultural production at 87 percent of 1957-59 levels, compared with 76 percent in 1965. The monetary reform of 1967 and the return of stability to the country are primary reasons for the upturn. These factors have induced merchants to return to areas from which they had previously fled. Plantations show signs of rehabilitation, and modest numbers of individual European planters are returning. Most importantly, the indigenous farmer is producing and selling more as more consumer goods are available for him to buy.

The Institut National pour l'Etude Agronomique du Congo (INEAC), the Congo's world-famed agricultural research organization, was dormant during the early sixties. Some substations are now concentrating on practical work of immediate importance. This work includes multiplying and providing planting material and seeds, breeding cattle, and reviving agricultural production on their own fields.

Considerable foreign aid has been received by the Congo for development. Major donors include the United States ($384 million since 1960), Belgium, France, the European Community, and the Food and Agriculture Organization of the U.N. Aid projects underway in the Congo include work on rice and vegetable production; development of market gardens in urban areas; improved and commercialized production of tobacco, cassava, oil palms, corn, tea, and pyrethrum; and development of cattle herds and veterinary services. Many current projects to improve transportation facilities will help to remove one of the main obstacles to increased agricultural production.

A development project proposed recently calls for AID and Congolese Government cooperation in developing a system for agricultural credit that will make adequate capital available to small agribusinesses, and production or marketing cooperatives, and to small and medium-sized farming enterprises. Some such firms have developed the managerial capacity to increase production or otherwise increase their income but lack the necessary capital to bring this about.

AGRICULTURAL TRADE

The Congo continues to adhere to its traditional policy of nondiscrimination with regard to trading partners. Tariff rates are applied uniformly to all countries; however, duties were raised on almost all imports to increase government revenue as part of the 1967 monetary reform. The import quota system was also abolished at that time.

Most Congolese trade is oriented toward Western Europe--primarily Belgium--and the United States, but the Congo has recently signed a number of bilateral trade agreements with neighboring African countries. These agreements call for Congolese manufactured goods to be exchanged for needed food commodities. The Congo is an associate member of the European Economic Community and a signatory of the Yaounde Treaty.

Agricultural commodities have decreased in relative importance among exports since production fell in the early 1960's, and mineral exports increased (table 2). Palm products, coffee, and rubber are the dominant agricultural exports; palm oil and rubber have steadily increased in importance since 1965.

Cereals are the major agricultural imports (table 3). However, the country is trying to become self-sufficient in rice. Imports of protein foods such as meat and fish products have been increasing. The typical Congolese diet is adequate in calories but lacks protein.

The United States is the leading supplier of farm produce to the Congo, accounting for 40 to 50 percent of the market in recent years, largely through Public Law 480 programs. Exports of U.S. agricultural commodities to the Congo have been primarily rice and wheat flour, valued between $8 and $11 million annually. Tobacco and cotton exports to the Congo have also been important (table 4).

U.S. imports of agricultural products from the Congo have averaged about $13 million annually in recent years. Coffee, rubber, palm kernels, and palm oil are the main items imported. The Congo is the second largest exporter of palm kernel oil to the United States, usually supplying 30 percent of total U.S. imports (table 5).

Table 1.--Agricultural production by commodity and indexes of total agricultural and food production, Congo (Kinshasa), average 1957-59, annual 1959-68

Commodity	Average 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	Prelim. 1968 1/
	1,000 metric tons										
Wheat	3	2	2	2	2	2	3	3	3	2	3
Rice, paddy	172	165	70	70	74	60	55	56	51	60	70
Millet and sorghum	54	50	30	44	42	43	44	44	44	45	47
Corn	328	333	378	265	226	232	237	240	245	250	255
Pulses	73	72	84	66	68	75	75	72	74	72	74
Potatoes	16	12	14	14	15	13	16	18	18	16	18
Cassava	7,522	7,212	7,000	6,500	6,500	7,000	6,800	7,000	6,800	7,000	7,200
Sweetpotatoes	315	316	276	269	275	291	291	298	310	310	320
Cotton	50	60	46	27	16	16	7	6	7	9	18
Urena and punga fibers	12	12	10	6	5	6	5	5	5	4	4
Cottonseed	101	120	91	54	32	32	14	12	14	18	36
Peanuts, in shell	173	174	175	130	122	122	113	113	113	113	115
Sesame seed	6	6	5	5	5	5	6	6	6	6	6
Pyrethrum flowers, dried	1	1	1	1	1	1	1	1	1	1	1
Bananas and plantains	1,687	1,464	1,451	1,300	1,350	1,400	1,400	1,450	1,500	1,550	1,600
Coffee	53	61	54	54	66	66	57	59	54	60	70
Cocoa beans	5	5	6	6	6	5	4	4	5	5	5
Tea	3	4	4	3	4	5	5	5	5	5	5
Rubber 2/	37	40	36	38	38	38	34	21	28	30	30
Quinine bark	2	2	1	1	1	1	1	1	1	1	1
Sugar, raw	26	35	28	31	44	41	30	30	35	45	41
Palm oil 3/	234	245	232	227	226	196	165	125	130	155	175
Palm kernels 3/	150	162	148	136	130	97	110	75	80	95	105
Meats	27	28	20	12	12	13	14	15	16	17	19
Milk	102	105	74	60	64	65	65	70	70	70	71
Indexes of production	(1957-59 = 100)										
Crops	100	100	93	85	85	86	80	77	78	82	87
Total agriculture	100	100	93	83	83	84	79	76	77	81	87
Total food	100	97	91	82	82	82	79	78	78	82	86
Per capita agriculture	100	97	89	77	76	74	68	64	64	66	69
Per capita food	100	95	87	76	75	73	68	66	65	66	68
Index of population 1958 population = 13,474,000	100.0	102.6	104.9	107.3	109.8	112.8	115.4	118.1	120.8	123.6	126.4

1/ Production data for cocoa beans, tea, sugar, palm oil, and palm kernels are from published reports of Foreign Agr. Serv., U.S. Dept. Agr., which were available in March 1969. 2/ Exports. 3/ Commercial.

Table 2.--Agricultural exports from Congo (Kinshasa), 1959 and 1963-68

Commodity	Quantity 1/							Value 2/						
	1959	1963	1964	1965	1966	1967	1968	1959	1963	1964	1965	1966	1967 3/	1968 3/
	1,000 metric tons							1,000 dollars						
Hides and skins	--	--	--	--	--	--	n.a.	640	32	6	6	30	n.a.	n.a.
Bananas	31.1	21.0	13.3	6.7	31.1	27.3	n.a.	1,240	564	162	90	144	n.a.	n.a.
Coffee	91.8	47.3	37.4	23.0	31.1	27.3	n.a.	38,280	22,052	27,616	17,146	25,808	25,300	31,200
Tea	3.5	5.6	3.4	4.1	5.6	3.0	n.a.	2,460	2,672	1,628	1,772	2,656	n.a.	n.a.
Corn	8.9	--	--	--	--	--	n.a.	440	--	--	--	--	n.a.	n.a.
Cassava	50.0	0.7	3.0	0.9	--	1.3	n.a.	2,960	32	66	66	--	n.a.	n.a.
Palm kernels	39.8	3.0	4.1	--	--	4.1	n.a.	5,840	304	144	--	--	n.a.	n.a.
Quinine root (bark)	1.8	0.5	0.4	0.1	0.6	--	n.a.	1,180	360	398	222	1,172	n.a.	n.a.
Rauwolfia	0.3	0.2	0.2	0.1	0.3	0.3	n.a.	360	244	354	212	396	n.a.	n.a.
Copal	4.1	0.6	1.1	0.7	0.8	0.8	n.a.	700	154	256	138	82	n.a.	n.a.
Cocoa	3.9	5.8	5.1	4.2	4.1	5.4	n.a.	2,880	2,378	2,502	1,146	1,192	2,500	3,400
Rubber	40.2	37.6	34.2	21.2	29.7	31.2	n.a.	22,260	19,032	14,944	9,088	12,510	12,000	14,800
Cotton fiber	52.8	9.1	3.1	--	--	--	n.a.	27,380	4,148	1,610	--	--	--	--
Urena and punga fibers	4.2	1.9	--	3.2	2.1	1.3	n.a.	1,080	338	--	488	390	n.a.	n.a.
Popaine	0.2	--	0.1	0.1	0.1	--	n.a.	480	168	318	486	376	n.a.	n.a.
Palm oil	185.5	143.5	123.9	65.7	83.9	114.9	n.a.	37,660	26,746	24,460	15,302	17,280	22,200	23,700
Palm kernel oil	60.7	32.0	44.3	31.3	32.3	37.2	n.a.	17,940	7,188	10,716	8,604	8,604	8,100	18,700
Cottonseed oil	6.0	1.2	0.8	0.1	--	--	n.a.	1,240	294	144	16	--	n.a.	n.a.
Peanut oil	7.0	--	--	2.9	--	--	n.a.	1,580	--	--	764	--	n.a.	n.a.
Oil cake: Palm kernel cake	61.1	30.8	40.9	30.5	28.2	37.4	n.a.	4,000	2,302	2,886	2,020	2,070	n.a.	n.a.
Cotton cake	27.6	5.2	2.9	1.7	1.4	0.9	n.a.	1,560	368	172	104	82	n.a.	n.a.
Peanut cake	9.2	1.0	0.6	0.1	0.1	--	n.a.	660	82	50	--	--	n.a.	n.a.
Other agricultural products								860	198	556	672	468	n.a.	n.a.
Total agricultural exports								173,700	89,656	89,108	58,342	73,270	74,700	100,400
Total merchandise exports								500,100	339,802	350,506	337,420	468,060	432,800	569,000
								Percent						
Exports of agricultural products as a percentage of total exports								34.7	26.4	25.4	17.3	15.7	17.3	17.7

Note: External trade data for the Congo (Kinshasa) since independence vary from source to source. Also, a complete series from one source has not been obtained. Since quantity and value figures were obtained from different sources, a computation of value per unit will not necessarily produce the actual price of goods.

Sources: 1/ Direction de la Statistique et des Etudes Economiques, complemented by data from the Societe Congolaise de Survellance. 2/ Bulletin Trimestriel des Statistiques Generales Direction de la Statistique. 3/ National Bank of the Congo, Annual Report, 1967, and data

Table 3.--Agricultural imports and inputs to the agricultural sector, Congo (Kinshasa), 1959 and 1963-67

Commodity	Quantity						Value				
	1959	1963	1964	1965	1966	1967 1/	1959	1963	1964	1965	1966
	1,000 metric tons						1,000 dollars				
Meat and meat products	7.9	19.5	14.4	14.4	18.2	n.a.	5,336	11,094	8,392	8,934	12,134
Fish and fish products	34.2	24.0	20.7	40.8	38.4	n.a.	9,374	8,040	8,808	14,862	18,080
Eggs and milk products	11.3	18.3	2.9	6.2	9.0	n.a.	6,598	10,980	1,920	4,652	6,198
Cereals and products	67.3	207.7	154.3	156.1	201.2	n.a.	10,094	26,222	17,970	20,208	26,228
(Corn)	(6.0)	(61.7)	(72.6)	(45.1)	(74.4)	(68.6)	(334)	(4,806)	(5,782)	(2,842)	(4,844)
(Rice)	(2.3)	(39.9)	(16.7)	(22.8)	(33.4)	(23.1)	(356)	(5,854)	(2,420)	(3,812)	(6,036)
(Wheat flour)	(38.7)	(74.5)	(40.9)	(55.7)	(52.3)	(60.3)	(5,360)	(10,294)	(5,666)	(7,402)	(7,090)
(Malt)	(16.5)	(20.9)	(17.0)	(23.5)	(27.1)	(14.6)	(2,498)	(3,732)	(2,864)	(4,382)	(4,760)
Fruit and vegetables	19.8	20.3	8.7	13.2	16.2	n.a.	5,414	4,272	2,350	3,052	4,152
Sugar and products	8.0	2.2	0.6	0.3	6.1	n.a.					
Tobacco, crude and manufactured	--	--	--	--	--	--	2,468	2,464	2,988	3,434	4,876
Other foods	--	--	--	--	--	--	3,896	2,296	1,732	1,686	3,976
Raw cotton, yarn, grey cloth	3.8	3.8	4.3	13.2 2/	8.8 2/	n.a.	4,558	4,390	16,616	13,508	10,290
Wood, rubber, and raw materials (of animal and vegetable origin)							798	548	660	480	1,186
Total agricultural imports							48,536	72,306	61,456	60,816	86,120
Seeds, industrial plants	1.4	2.7	0.9	0.6	0.5	n.a.	830	1,248	952	796	854
Fertilizer	13.2	7.9	7.3	5.6	6.0	n.a.	958	610	586	454	674
Agricultural machinery							1,100	372	666	474	494
Total imports of agricultural products and inputs to the agricultural sector							51,424	74,536	63,660	72,540	88,142
Total imports							299,880	252,610	284,412	319,254	336,468

1/ Foreign Agr. Serv. reports. 2/ The foreign trade statistics do not separate imports of raw cotton from those of yarn and grey cloth. Imports of raw cotton were reported to be 9,500 and 7,500 metric tons respectively in 1965 and 1966. Previously there was a net export surplus of cotton. n.a. = not available.

Source: Bulletin Trimestriel des Statistiques Generales.

Table 4.--U. S. agricultural exports to Congo (Kinshasa), 1966-68

Commodity	Quantity			Value		
	1966	1967	1968	1966	1967	1968
	--- Metric tons ---			--- 1,000 dollars ---		
Meat and meat preparations	152	9	1	107	12	2
Dairy products	--	--	--	1,128	549	735
Grain and preparations	--	--	--	10,952	9,425	8,473
Rice	32,825	18,286	13,406	5,128	3,258	2,644
Wheat flour	43,545	46,992	45,813	4,311	4,342	4,629
Tobacco	1,298	2,418	1,162	1,981	3,877	1,620
Cotton	3,302	5,825	6	1,940	3,556	1,977
Vegetable oils	1,009	1,311	582	408	479	190
Other	--	--	--	1,125	1,684	1,553
Total agricultural				17,641	19,582	14,550
Nonagricultural				39,280	29,479	36,108
Total exports				56,921	49,061	50,658

Table 5.--U. S. agricultural imports from Congo (Kinshasa), 1966-68

Commodity	Quantity			Value		
	1966	1967	1968	1966	1967	1968
	--- Metric tons ---			--- 1,000 dollars ---		
Coffee	2,151	2,498	15,583	1,833	1,852	11,208
Tea	463	549	337	389	379	240
Rubber, crude	7,765	8,007	16,899	3,719	3,453	6,375
Palm kernels and palm oil	18,032	14,873	18,267	4,969	3,647	5,770
Other	65	56	93	282	419	737
Total agricultural				11,192	9,750	24,330
Nonagricultural				33,529	30,698	17,541
Total imports				44,721	40,448	41,871

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HAITI'S AGRICULTURE AND TRADE

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

U.S. DEPARTMENT OF AGRICULTURE

NEG. ERS 7060-69(9) ECONOMIC RESEARCH SERVICE

SUMMARY

Haiti's agriculture and trade growth have been held back by drought, hurricanes, outdated farming practices, lack of transportation and marketing facilities, and political instability. But because other sectors of the economy are undeveloped or developing slowly, agriculture continues to account for more than half the gross national product and foreign exchange earnings.

The United States is Haiti's principal trading partner, taking over two-fifths of the exports in 1965/66 and furnishing Haiti with more than 55 percent of its imports during the same period. Coffee accounted for 54 percent of Haiti's exports in 1965/66, with the United States taking more than one-quarter of the foreign marketings. Other Haitian exports of importance were sugar (virtually all to the United States), sisal, essential oils, bauxite and copper ore, and handicrafts.

Haiti's imports include wheat and flour, fats and oils (mostly soybean oil), dairy products, tobacco, textiles, petroleum products, motor vehicles, pharmaceuticals, and hardware. Though the United States probably lost the Haitian market for wheat in 1969, when management of Haiti's sole flour mill was taken over by a Canadian firm, it has retained all of the trade in unmanufactured tobacco, virtually all of the market for fats and oils, three-quarters of the fruit and vegetable business, and nearly half the sales of all other goods.

Haiti's agriculture consists of a few commercial crop farms that produce for world trade and a large base of entirely subsistence farm operations. About 85 percent of the population is rural, and arable land averages less than one-half acre per person.

Though a few large sugar and sisal plantations exist, Haiti's agriculture is essentially a minifundia, or small-scale operation. Coffee, the major commercial crop, is grown on some 300,000 small plots of 1 to 2 acres. Basic food crops such as rice, corn, beans, and fruits and vegetables are similarly grown on a small scale. Farming methods, generally, are rudimentary. There is little cash for fertilizer and the only implements widely found are the hoe and machete. Irrigation could make much more of the land productive, but serious erosion continues unchecked, leaving more than 43 percent of Haiti's entire land surface in the category of "waste and unproductive." A prolonged and severe drought, which did not break until late in 1968, and a series of damaging tropical storms have added to the plight of Haitian farmers in recent years.

Haiti's imports of U.S. goods will probably increase as tourism and labor-intensive re-export industries continue their modest expansion. Haiti's agricultural economy, however, has been stagnant for a long period, with food production lagging behind population growth. Tourism, light industry, and construction activity are the segments of the economy presently exhibiting growth. Any factors, however, leading to greater stability will likely attract foreign investment, which in turn may revitalize Haiti's sluggish economy.

HAITI'S AGRICULTURE AND TRADE

By
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Haiti occupies the western third of the island of Hispaniola, second largest of the West Indies. Haiti's long and turbulent history has included many firsts. Haiti was one of the first areas visited by Christopher Columbus, and it was also the site (though not permanent) of the first settlement in the New World. In 1804, Haiti became the world's first Negro republic. It is also the only republic in the New World where the official language is French.

Lack of natural resources, political instability, and large population, however, have hindered economic development. Haiti, once widely known as the "Queen of the Antilles," now has the lowest per capita income and living levels in the Western Hemisphere.

The Republic of Haiti is located in the Caribbean about 18 degrees north of the Equator. It is shaped like a giant horseshoe with the open end facing eastern Cuba, only 55 miles away. Haiti's area of 10,714 square miles compares in size with Maryland. The land itself is ruggedly beautiful; two-thirds of its area consists of nearly inaccessible eroded mountains, interspersed with valleys and plateaus which are mostly under cultivation. Land and other communications are difficult, and roads are either badly maintained or nonexistent. In 1963, Haiti had 1,760 miles of roads but only 344 miles were all-weather. Many of the latter have since deteriorated because of neglect (fig. 1).

The people of Haiti are Creole-speaking Negroes. Most of them lack opportunity to enter the money economy because of a combination of chronic poor health from substandard diets, illiteracy (only 10 percent of all Haitians can read and write), and scarcity of agricultural aid or nonfarm jobs. In 1968, the population totaled 4.7 million, with more than 400 persons to the square mile--one of the most densely peopled areas of the Western Hemisphere. The ratio of arable land to population (less than ½ acre per person) is one of the lowest anywhere. The population growth rate, 2.0 percent or less (below average for the Caribbean), is relatively low because life expectancy in Haiti is less than 40 years. About 85 percent of the people, an unusually high percentage, are classified as rural. The population is concentrated along Haiti's coastline and in the valleys comprising the major agricultural areas. Port-au-Prince, the capital (population 250,000), is the Republic's only large city.

Figure 1.--Rural Haiti. (Pan American Union photo.)

CLIMATE

Temperatures and rainfall, the latter ranging from almost none in parts of the northwest peninsula to 90 inches in the central valleys, vary considerably because of the many mountains and irregular coastline. The four seasons are alternately rainy and dry. The first rainy period is in April and May, and the second extends from September to November. The country is substantially frost free year round, even at the higher elevations exceeding 8,000 feet. Temperatures normally range from 75° to 90° F. during the Haitian winters and from 80° to 96° F. during the summers. The cooler dry season extends from December through March. Haiti recently emerged from a severe drought which began in late 1966 and affected the entire northern Caribbean region. Between 1963 and 1966, Haiti experienced three damaging hurricanes. Coffee production was especially hard hit in 1966 and has not yet recovered.

POLITICAL DISTRICTS

For administrative purposes, Haiti is divided into five districts. The Northwest is mountainous and semiarid. It contains no cities of importance and only 6 percent of the people live there. The North includes plains and mountains and is also semiarid. Cap-Haitien, Haiti's second city, is its focal point. About 17 percent of Haiti's population lives in the North. The Artibonite, the Republic's largest district, includes the cities of St. Marc and Gonaives, and accounts for about 18 percent of the country's population. The West embraces the capital, Port-au-Prince, and is the most important agriculturally. In addition to sugarcane, vegetables, coffee, and sisal, the West contains important forest areas. Some 37 percent of the population lives in the West. The South includes the Grand Anse region, Haiti's most heavily wooded section. Les Cayes is the principal city, and it is in this zone that nearly a quarter of the population is to be found. Rice, sugarcane, coffee, and vegetables are grown in the South district.

LAND USE AND CUSTOMS

Despite the existence of a few large sugar and sisal operations (for example, HASCO, the Haytian-American Sugar Company, owns 11,000 hectares 1/ of canefields and reportedly accounts for 80 percent of the sugar produced), minifundia (small-scale operation) is the rule in Haiti. Fragmentation of farms constitutes a very serious problem. Titles to the small plots held by small farmers are frequently unclear, boundaries are poorly defined, and the plots themselves are usually too small and separated for economic operation. An estimated 90 percent of all Haitian farms are less than 6 hectares and only 2 percent of all land holdings exceed 26 hectares. The average small holding amounts to about 0.6 hectare.

Less than one-third of the land area is considered capable of raising crops. Of the 870,000 hectares of cropland, about 43 percent, or 370,000 hectares are in perennial crops, while the remaining 500,000 hectares are seeded annually (table 1). The area under irrigation is placed at 70,000 hectares. Another 18 percent of the total land area is in rough pasture, and about 7 percent is

1/ 1 hectare equals 2.47 acres.

classified as forest. The category called "unproductive lands" includes more than 43 percent of Haiti's entire surface.

On the upland slopes, small subsistence farmers raise most of the coffee, Haiti's major source of foreign exchange. Other very small units produce most of the domestic food crops. Many small operators double- and triple-crop their land to eke out an existence. Mechanization of these small units is impractical and the hoe and machete continue to be the principal implements used. Little or no fertility is returned to the soil, poor cultural practices result in low yields, and serious soil erosion continues unchecked. Irregular rainfall, unsuitable soil types, and other factors deny Haiti the use of half of its plains area. The need for more cropland grows progressively greater in Haiti as the population increases. Erosion control and land restoration measures, together with irrigation works and agricultural training for the predominantly rural population, are urgently needed.

ECONOMIC ACTIVITIES

Table 2 suggests the degree to which the Haitian economy has stagnated. Small increases during recent years have failed to keep pace with population growth. Agriculture annually accounts for between 40 and 50 percent of the gross domestic product.

Though Haiti's major industry is agriculture, forestry, mining, fishing, and tourism are also important. Haitian mahogany and other native tropical woods are well known in the furniture and building trades. Furthermore, forest products constitute the basis for much of the important handicraft industry which specializes in wood-carvings, furniture, and similar items. In 1961, more than 90,000 tourists visited Haiti, and their contribution to the economy reached $3.4 million, making tourism second in importance as an earner of foreign exchange. After 1961, however, tourist numbers declined sharply, because of concern over political stability and the effects of adverse publicity. Commencing with 1965 there has been sustained growth, with gross receipts from the tourist business amounting to $2.1 million in 1967. Tourist numbers gained 17 percent in 1968 while gross receipts rose to an all-time high of $3.9 million (table 3).

Haiti's low industrial wage structure, averaging less than $2 per day, and its large labor surplus have been the basis for a number of labor-intensive industries involving the importation of raw materials for re-export in more finished forms. These industries include manufactured electronic components, footwear, stuffed toys, decorated wearing apparel, and the processing of imported fabrics. More than half the baseballs and softballs imported into the United States are manufactured in Haiti. A U.S. firm mines bauxite in Haiti, and ships the ore to the United States for refining. Copper ore is mined by a foreign-owned firm and exported for processing.

Fishing is a relatively important activity and the processing of spiny lobsters for the market is also growing in importance.

AGRICULTURAL PRODUCTION

Haiti's varied geography permits the growing of a wide range of crops. Lack of facilities for assembling, storing, transporting, and marketing, however, have largely nullified this asset. Except for coffee, sugar, and sisal, most Haitian crops are grown for domestic use. Corn, millet, and sweetpotatoes are mainstays of the average diet, which is supplemented with rice, beans, pigeon peas, tubers, and many kinds of tropical and citrus fruits. The value of annual food imports averages less than $3 per person. In 1968, the index for total food production was only 87 (basis 1957-59=100), while the per capita food production index had declined even more to 72.

Haiti's only census, completed in 1950, provides area data for selected crops. Except for cotton, they are apparently little changed from today's figures. Area estimates for Haiti, though particularly difficult to make because of multiple-cropping and the noncommercial nature of many of the local crops, are:

Crop	Area in Hectares	Crop	Area in Hectares
Coffee	200,000	Plantains	145,000
Sugarcane	2/85,000	Corn	335,000
Sisal	32,000	Sorghums	215,000
Cotton	52,000	Rice	65,000
Cacao	4,700	Beans	100,000
Bananas	78,000	Sweetpotatoes	95,000

2/ Probably less than 15,000 hectares are used for commercial sugar production. Balance is made into "clairin" (a native beverage), alcohol, and "rapadou," a syrup used by rural people as a sweetener.

Haiti's farms number 560,000. An average small farm consists of several small plots, each annually planted to the same crop, often with the plots some distance from one another. Ordinarily, only production in excess of an individual farm family's needs is taken to market, borne by country women on their heads, or by donkeys.

The daily per capita food availability for 1959-61 was estimated at 1,780 calories and 46 grams of protein. This falls well below the Caribbean average, adding importance to food aid from external sources. Haiti continues to receive large aid donations in the forms of cash, loans, food, and technical assistance. These have been essentially humanitarian in nature, and come from religious and other charitable groups, foreign governments, and international organizations. In 1968, total aid contributions were about $9 million.

Most direct U.S. Government aid ceased in 1963. At present, U.S. direct aid is limited to a malaria control project, distribution of surplus food donations, and a few miscellaneous smaller projects. International organizations such as the Inter-American Development Bank, the United Nations, and the Organization of American States are annually spending several million dollars for projects aimed primarily at upgrading Haitian health and agriculture.

Religious and charitable groups make substantial contributions and several European governments also carry on aid projects of modest proportions. In 1968, food aid was increased sharply by donors in response to near-famine conditions in Haiti's arid northwest area.

Haiti's most important crop is coffee, which annually accounts for nearly half of all foreign exchange earned. Coffee growing is truly a minifundia operation, with most of the cherries gathered from an estimated 300,000 units of 1 or 2 acres each. The largest coffee plantation is said to be less than 70 hectares. A wide variety of cultural practices are used to grow coffee; much of the crop receives little or no cultivating. Haphazard production practices and coffee's biennial-bearing characteristics result in uneven yields and quality. But the crop permits the small farmer to obtain a little cash to purchase items he does not produce. In September 1966, Hurricane Inez dealt coffee production a severe blow, and even today, output (around 30,000 tons) is 9 percent below the 1963-65 average (tables 4 and 5). Individual growers employing primitive methods perform the depulping, and the harvest is dried and exported without further processing. Haiti was granted a quota of 397,750 bags of coffee (23,865 metric tons) under the International Coffee Agreement for the year commencing October 1, 1968.

Agricultural production methods are illustrated in figure 2.

Figure 2.--Tilling young sugarcane. (Pan American Union photo.)

Sugar is Haiti's second most important agricultural commodity. In 1968, Haiti grew an estimated 630,000 metric tons of cane for commercial sugar, but the actual amount of sugar extracted came to only 57,000 tons--a relatively low yield of about 9 percent. Sugar estates produce most of the cane and small farmers supply the balance. Most of the sugarcane is planted in the immediate vicinity of Port-au-Prince, where the largest mill is located. About 20 percent of Haiti's centrifugal sugar is produced near Les Cayes on the southwest peninsula, site of a second smaller mill. A lesser acreage of cane is near Cap-Haitien, where, after many delays, a new mill (annual capacity 17,000 tons) is being readied. The sugar industry normally furnishes employment for a substantial part of those counted in the labor force. The work is seasonal, however, and the wages extremely low. Virtually all sugar produced by Haiti in excess of domestic needs is sold to the United States at relatively attractive quota prices. Haiti's 1968 sugar quota totaled 23,276 metric tons.

In the past, sisal has been an important segment of Haitian agriculture, but world demand has slackened, leaving processors with large uncommitted stocks. Production of sisal averaged 28,000 metric tons in 1959-63. In 1967, output dropped sharply to 11,000 tons. Though market conditions were little improved, sisal production rose to 16,000 tons in 1968, a volume approaching that of more recent years largely because of a production cost adjustment. The major sisal production area is near the north coast, with a secondary area just north of Port-au-Prince.

Haitian cotton plantings are estimated at 6,000 hectares. Much of Haiti's cotton needs, however, are met through importation of textiles and clothing.

The west central part of Haiti, which comprises the curved center of the horseshoe, is known as the Artibonite Region, named for Haiti's most important river which drains it. This area is the country's breadbasket. Irrigation enables the semiarid Artibonite to produce most of Haiti's rice. The Artibonite also serves as a livestock grazing center.

Beef and veal production was estimated at 10,000 tons in 1968--15 percent below 1965 and 1966. While pork output has leveled off at 10,000 tons annually, it continues at the rate of only two-thirds of the 1959-63 average.

RURAL DEVELOPMENT

In 1965, the National Council for Development and Planning (CONADEP), charged with establishing priorities for public investment and development, was reorganized and placed under direct control of the President. Some of the high priorities set by this agency affecting agriculture have related to more efficient use of irrigation water, increased application of fertilizers and insecticides, pasture improvement, and the upgrading of cattle. Introduction of small processing plants, such as slaughterhouses, has similarly been encouraged.

Through the Institute Haitien de Promotion du Cafe et des Denrees d'Exportation (IMCADE), formerly the Office du Cafe, the Ministry of Agriculture purchases coffee for export and carries out measures for standardizing and improving coffee quality. Other services offered coffee growers include credit and processing. As suggested by its name, the Institute of Agricultural and

Industrial Credit (IHCAL) assists in financing agricultural and other enterprises. This agency also operates programs designed to stimulate domestic food production through teaching improved cultural practices.

Another Government-sponsored organization is the Institute for Agricultural and Industrial Development (IDAI), chiefly concerned with reviving the once-important cotton producing industry that was nearly eliminated some years ago by heavy boll-weevil infestation. IDAI also performs limited marketing services such as storage and processing as part of its goal of stabilizing supplies of basic food crops. Between 1963 and 1966, IDAI financed 6,100 cotton farmers and purchased 7.3 million pounds of beans, corn, and millet.

FOREIGN TRADE

The United States is Haiti's major trading partner, taking two-fifths of Haiti's exports and supplying more than half of all imports. Unlike many other countries, Haiti imposes no restrictions on imports and export of currency. Much business within Haiti is transacted with U.S. currency.

Haiti's present foreign trade policy is directed toward acquiring foreign exchange by exporting coffee, sugar, sisal, essential oils, and nonagricultural exports such as handicraft articles, minerals, and light manufactures. The Government also encourages foreign investments through such devices as tax holidays, protection from foreign competition, and special customs arrangements. Haiti generally follows a multilateral trade policy. It reduces import tariffs to its principal suppliers through its membership in GATT and also maintains bilateral agreements with France.

More than half of all Haitian Government revenues are derived from import and export duties. Official customs import figures of course do not include smuggled goods that are believed to be extensive. There are no general export controls, although many products are subject to duties and taxes. Certain processed and competitive import products require licenses. The mean for tariffs (though differing considerably between products) is about one-third of the value of the product. The Government tobacco monopoly, Regie du Tabac, controls the importation of many essential products such as foodstuffs, cosmetics, cotton and other fabrics, vehicle tires and tubes, electric and nonelectric machines, and appliances.

Official trade statistics, shown in table 6, indicate that the United States purchased nearly 43 percent of Haiti's exports in 1965/66. Belgium had less than 12 percent, and next were Italy and France with 11 and 9 percent. The United States also led by supplying 56 percent of all imports, and was followed by West Germany, Japan, and Curacao, each accounting for less than 5 percent of the total.

Textiles, petroleum products, vehicles, pharmaceuticals, and machinery comprise Haiti's most important nonagricultural imports. Major food items presently purchased by Haiti include wheat, vegetable oils and fats, dairy products, fish products, and food specialties (tables 7 to 10). The United States furnishes nearly all of the imported raw materials used in Haiti's re-export industries.

Among the agricultural exports, coffee predominates. During 1965/66, the value of coffee exports was $20.7 million, or 54 percent of all exports (table 8). During the same period, sugar and sugar product exports earned $3.1 million in revenues for approximately 8 percent of the total. Sisal exports were valued at $2.7 million, or about 7 percent of all export earnings. Mineral exports (bauxite and copper ore) accounted for almost 15 percent of total export value. Bauxite shipments will likely gain in importance while maintaining the present volume of copper ore shipments could depend upon discovery of new deposits.

As indicated in table 7, the single largest category of agricultural imports is fats and oils, and the most important item in this group is soybean oil. In 1965/66, fats and oils comprised nearly 43 percent of all agricultural imports, with 95 percent of the total coming from the United States. Wheat and flour imports were next in importance ($2.7 million or 29 percent of total agricultural imports). Virtually all wheat and flour originated in the United States (table 9). For some years, a single U.S.-owned flour mill has supplied the needs of the Haitian market. This mill possesses sufficient capacity for supplying flour to other nearby islands, including Jamaica. In June 1968, however, the mill ceased operating and Haiti had to import flour for domestic use. In 1969, the Haitian Government purchased the mill and signed an operating agreement with a Canadian firm.

As a group, dairy products account for more than 12 percent of Haiti's agricultural imports, but in this category the U.S. share has been relatively small. The Netherlands continues to be the principal supplier of dairy products, providing nearly half of the dairy imports during 1965/66. The largest single component has been evaporated milk. The United States furnished all the unmanufactured tobacco (valued at $204,000) imported in 1965/66.

Table 11 sets forth basic data on trade in agricultural commodities between the United States and Haiti for the 5-year period, 1964-68. Not only does this table cover a later period than other tables, but it is also more specific in describing the items traded. U.S. agricultural imports from Haiti in 1966 dropped almost 20 percent below the 1964 level but in the last 2 years made a slight recovery. U.S. exports of soybean oil steadily gained during the period, apparently at the expense of other fats and oils.

OUTLOOK

The outlook for both Haitian trade and agriculture is not very encouraging. Haiti's economy, particularly the agricultural sector, is lethargic, and there are few indications that conditions will improve. The country is slowly emerging from the depressing effects of the drought, while the coffee industry, hard-hit by Hurricane Inez in 1966, has not regained its former productive capacity. The 1969 level of imports from the United States will probably rise, despite Haiti's shift to purchasing wheat from Canada.

Haiti's investment climate is slightly improved. Its potential as a tourist attraction is again becoming recognized, and new hotels and industries are under construction. Increased tourism can provide needed foreign exchange and additional jobs. Haiti's advantageous wage differentials should attract more industries based on imports of raw materials and their re-export as assembled finished products. Its greatest resource is people who can be trained and are used to hard work.

Table 1.--Haiti: Classification of land area, 1960

Land use and type	Land area	Percentage of total area
	1,000 hectares	Percent
Total cropland	870	31.3
Perennial crops		
Productive lands: fertile good humidity conditions	(300)	(10.8)
Irrigated plains and valleys	(70)	(2.5)
Annual crops		
Coastal lands, hilly, dry, and semiproductive	(100)	(3.6)
Submarginial mountainous lands, exhausted	(150)	(5.4)
Zone similar to lowlands	(250)	(9.0)
Rough pasture	500	18.0
Forests	200	7.2
Unproductive lands	1,200	43.5
Abandoned barren areas	(500)	(18.0)
Arid and stony areas	(400)	(14.7)
Salty lands	(300)	(10.8)
Total area	2,770	100.0

Source: Rapport de la Commission pour la Conservation des Resources Naturelles Renouvelables, Sept. 1960.

Table 2.--Haiti: Population, gross national product, and gross domestic product, selected years

Year	Population	Gross national product		Gross domestic product		Agriculture as percentage of GDP 1/
		Total	Per capita	Total	Per capita	
	Mil.	Mil. dol.	Dol.	Mil. dol.	Dol.	Pct.
1955	3,645	264	72	300	82	45.0
1959	3,917	273	70	299	76	41.5
1962	4,146	307	74	344	83	39.6
1965	4,396	298	68	329	75	41.7
1966	4,485	302	67	336	75	41.5
1967	4,575	2/345	2/75	2/379	2/83	2/40.0
1968	4,667	2/340	2/73	2/373	2/80	2/41.0

1/ Excludes revenues from forestry, hunting, and fishing.
2/ Estimates by Western Hemisphere Branch, Economic Research Service.

Sources: Population estimates, AID; Tri-Partite Mission to Haiti--General Report to Government of Haiti.

Table 3.--Haiti: Tourism, number of arrivals, and gross receipts, 1958-68

Year	Tourists arriving	Percentage change from previous year	Gross receipts	Percentage change from previous year
	No.	Pct.	Mil. dol.	Pct.
1958	58,005		2.2	
1959	67,008	+16	2.5	+14
1960	79,299	+18	3.0	+20
1961	91,294	+15	3.4	+13
1962	88,582	-3	3.0	-12
1958-62 average	76,838		2.8	
1963	60,617	-32	2.1	-30
1964	17,321	-71	0.9	-57
1965	26,533	+53	1.8	+100
1966	35,558	+34	1.7	-6
1967	43,842	+23	2.1	+24
1963-67 average	36,774		1.7	
1968	51,156	+17	3.9	+86

Sources: National Bank of Republic of Haiti; National Tourist Office and U.S. Embassy, Port-au-Prince.

Table 4.--Haiti: Production of selected agricultural commodities, annual 1964-68 and average 1959/63

Commodity	Average, 1959/63	1964	1965	1966	1967	1968
	1,000 metric tons					
Coffee	35	33	34	28	30	29
Sugar, raw	63	62	64	62	54	51
Tobacco	1	1	1	1	1	1
Cotton fiber	1	1	1	1	1	1
Cacao	2	3	2	2	2	2
Rice, rough	40	40	42	43	43	43
Corn	83	79	76	81	75	73
Sisal	28	26	21	20	11	16
Beef & veal	10	11	12	12	11	10
Pork	15	10	10	10	10	10

Sources: Estimates by Foreign Agricultural Service and Western Hemisphere Branch, Economic Research Service.

Table 5.--Haiti: Production and disappearance of green coffee, 1960/61 to 1969/70

Marketing year	Production	Exports	Domestic consumption 1/
	(Thousand 60-kg. bags @ 132.3 lbs.)		
1960/61	425	275	150
1961/62	725	560	165
1962/63	590	425	165
1963/64	530	365	165
1964/65	550	385	165
Average, 1960/61-1964/65	564	397	167
1965/66	575	405	170
1966/67	465	290	175
1967/68	500	320	160
1968/69	465	280	185
1969/70 2/	500	315	185

1/ Residual of production less exports. 2/ First estimate.

Source: FAS-World Agricultural Production and Trade, June 1969 and earlier issues.

Table 6.--Haiti: Value of imports and exports, selected countries, 1961/62 to 1965/66 1/

Country	Imports					Exports				
	1961/62	1962/63	1963/64	1964/65	1965/66	1961/62	1962/63	1963/64	1964/65	1965/66
	1,000 dollars									
West Germany .	2,219	1,970	1,537	1,692	1,711	910	1,291	1,792	1,077	935
Belgium. . . .	1,306	1,063	1,060	1,020	852	4,621	4,459	4,711	4,089	4,480
France	1,268	1,228	1,164	1,322	1,251	2,918	2,288	2,370	3,806	3,449
Italy.	781	914	870	1,060	725	5,250	3,196	2,745	4,200	4,192
Netherlands. .	1,347	1,336	1,270	1,268	1,193	1,730	1,852	2,061	2,463	2,765
United Kingdom	1,677	1,780	1,593	1,593	1,494	44	67	64	39	479
Japan.	108	132	265	1,239	1,601	2,663	2,565	2,492	1,660	1,988
Canada	975	889	938	1,073	977	75	38	64	20	15
United States.	20,494	20,486	20,940	20,653	20,116	18,102	24,077	18,001	16,116	16,359
Curacao. . . .	1,539	522	1,596	1,260	1,594	267	66	11	5	5
Jamaica. . . .	28	44	54	286	339	858	803	629	1,072	616
Puerto Rico. .	64	74	98	80	214	896	1,008	1,101	1,242	1,156
Other.	5,701	5,576	4,516	4,560	3,934	2,498	1,502	1,921	1,981	1,927
Total. . . .	37,507	36,014	35,901	37,117	36,001	40,832	43,212	37,962	37,769	38,366

1/ Fiscal year: October-September.

Source: Rapport Annuel de L'Administration Generale des Douanes.

Table 7.--Haiti: Value of imports and exports by major commodities 1961/62 to 1965/66 1/

Commodity	1961/62		1962/63		1963/64		1964/65		1965/66	
	Total	U.S.	Total	U.S.	Total	U.S.	Total	U.S.	Total	U.S.
	1,000 dollars									
IMPORTS										
Meat & meat products	260	138	202	96	207	90	188	68	221	113
Wheat & flour	2/3,370	2/3,370	1,870	1,869	1,675	1,674	2,429	2,428	2,703	2,702
Dairy prod. & eggs	1,235	377	1,187	339	1,476	507	1,160	180	1,167	203
Fruit & vegetables	564	529	550	405	535	415	600	503	413	337
Fats and oils	1,698	1,474	1,798	1,733	2,872	2,698	3,993	3,838	3,941	3,742
Tobacco, unmanuf.	149	419	205	205	220	220	245	245	204	204
Fish & fish prep.	621	18	569	37	699	55	749	41	603	24
Other imports	25,668	11,528	29,633	15,802	28,216	15,281	27,751	13,351	26,749	12,776
Total imports	33,565	17,845	36,014	20,486	35,900	20,940	37,115	20,654	36,001	20,101
U.S. share, total imports	53.2		56.9		58.3		55.6		55.8	
EXPORTS										
Coffee	20,663	5,325	16,789	4,565	17,536	5,548	19,321	4,326	20,724	5,608
Sugar	1,696	1,696	5,528	5,477	1,952	1,453	2,417	2,417	2,821	2,386
Sisal	2,315	1,474	3,816	2,533	3,833	2,090	2,419	1,648	2,753	1,476
Essential oils	1,515	1,023	1,060	655	845	536	1,215	718	2,003	1,446
Bauxite	3,669	3,669	4,934	4,934	3,939	3,939	3,647	3,647	3,631	3,631
Copper ore	3,238	---	2,544	---	3,035	260	2,244	---	1,965	---
Other exports	7,736	4,915	8,541	5,913	6,822	4,175	6,506	3,360	4,469	1,812
Total exports	40,832	18,102	43,212	24,077	37,962	18,001	37,769	16,116	38,366	16,359
U.S. share, total exports	44.3		55.7		47.4		42.7		42.6	

1/ Based on fiscal year October-September. 2/ f.o.b. basis; from U.S. export statistics.

Sources: Rapport Annuel de L'Administration Generale des Douanes. U.S. Bureau of the Census: U.S. Foreign Agricultural Trade by Countries, 1961 and 1962.

Table 8.--Haiti: Value of total exports, selected commodities, 1960/61 to 1965/66

Commodity	1960/61		1961/62		1962/63		1963/64		1964/65		1965/66	
	Mil. dol.	Pct.	Mil. dol.	Pct.	Mil. dol.	Pct.	Mil. dol.	Pct.	Mil. dol.	Pct.	Mil. dol.	Pct.
Coffee.	12.1	40.0	20.7	50.7	16.8	38.9	17.5	46.0	19.3	51.0	20.7	54.1
Molasses. . . .	.6	2.0	.5	1.2	.7	1.6	.4	1.1	.3	.8	.3	.8
Sisal	3.4	11.2	2.3	5.6	3.8	8.8	3.8	10.0	2.4	6.4	2.7	7.0
Sugar	4.5	14.8	1.7	4.2	5.5	12.8	2.0	5.3	2.4	6.4	2.8	7.3
Essential oils.	1.5	4.9	1.5	3.7	1.1	2.5	.8	2.1	1.2	3.2	2.0	5.2
Bauxite	2.9	9.6	3.7	9.1	4.9	11.3	3.9	10.3	3.6	9.5	3.6	9.4
Copper ore. . .	1.0	3.3	3.2	7.8	2.5	5.8	3.0	7.9	2.2	5.8	2.0	5.2
Small industry products. . .	1.6	5.3	3.3	8.1	3.8	8.8	3.0	7.9	2.3	6.1	2.3	6.0
Other	2.7	8.9	3.9	9.6	4.1	9.5	3.6	9.4	4.1	10.8	2.0	5.0
Total	30.3	100.0	40.8	100.0	43.2	100.0	38.0	100.0	37.8	100.0	38.4	100.0

Fiscal year: October-September.

Source: Rapport Annuel de L'Administration Generale des Douanes.

Table 9.--Haiti: Exports and imports of selected agricultural commodities, principal countries

Commodity and country	Exports			Commodity and country	Imports		
	1963/64	1964/65	1965/66		1963/64	1964/65	1965/66
	- - - 1,000 dollars - - - -				- - - 1,000 dollars - - - -		
Coffee				Wheat and flour			
United States. .	5,548	4,326	5,608	United States. . .	1,674	2,428	2,702
Belgium.	4,550	3,990	4,432	Other.	1	1	1
Italy.	2,676	4,130	4,079				
Other.	4,762	6,875	6,605	Fats and oils			
				United States. . .	2,698	3,838	3,742
Sugar				Norway	43	62	83
United States. .	1,453	2,417	2,386	Other.	131	93	116
France	440	---	---				
Other.	59	---	435	Dairy products & eggs			
				United States. . .	507	180	203
Sisal				Denmark.	95	94	44
United States. .	2,090	1,648	1,476	Netherlands. . . .	654	590	552
W. Germany . . .	1,347	570	601	Other.	220	296	368
Other.	396	201	676				
				Tobacco (unmanuf.)			
Beef & veal				United States. . .	220	245	204
U.S. Mainland. .	450	395	205	Other.	---	---	---
Puerto Rico. . .	726	618	672				
Other.	---	---	---				

1/ Based on October-September fiscal year.

Source: Rapport Annuel de L'Administration Generale des Douanes.

Table 10.--Haiti: Selected export and import items, 1963/64-1965/66

Commodity	1963/64	1964/65	1965/66
	Metric tons		
EXPORTS			
Coffee	22,426	22,654	24,351
Molasses	22,173	22,370	23,482
Sisal	17,453	14,054	17,653
Sugar, raw	14,718	23,121	28,972
Meat	1,667	1,224	1,237
Essential oils	114	166	239
Bauxite	457,655	427,799	412,017
Copper ore	15,045	10,221	9,828
IMPORTS			
Fish, fresh & prepared	2,478	2,564	1,987
Lard	31	24	24
Milk, fresh & processed	3,804	2,542	2,151
Oleo & edible fats	3,240	3,228	3,069
Soybean oil	3,822	5,751	6,033
Tobacco, unmanufactured	82	95	73
Wheat	22,458	33,160	48,785
Wheat flour	---	325	49

Source: Rapport Annuel de L'Administration Generale des Douanes, 1963/64, 1964/65 and 1965/66.

Table 11.--U.S. agricultural trade with Haiti, 1964-68 calendar years

Commodity	1964	1965	1966	1967	1968
	- - - - - - - - 1,000 dollars - - - - - - - -				
U.S. EXPORTS					
Nonfat dried milk.	432	392	218	217	635
Lard	933	908	1,054	732	701
Tallow, inedible	557	738	795	933	906
Corn meal.	281	117	114	216	365
Wheat, grain	2,934	3,852	2,237	3,297	552
Wheat, flour	358	106	62	66	2,013
Soybean oil, refined	1,106	1,765	1,783	1,804	1,881
Vegetable oils, foots, etc.	12	474	133	107	62
Other veg. oils & fats . . .	223	153	149	234	36
Tobacco.	831	734	823	724	847
Fruits, vegetables & prep. .	317	249	307	191	219
Other food for relief. . . .	300	72	147	190	603
Other agricultural products.	698	146	172	132	437
Total.	8,982	9,706	7,994	8,843	9,257
U.S. IMPORTS					
Chocolate & prep.	529	719	477	786	610
Coffee, green.	6,144	4,960	4,527	3,794	3,844
Sisal & henequen	2,890	1,604	1,264	538	814
Essential oils	1,171	1,227	1,566	1,825	2,633
Beef, fresh & frozen	1,067	832	660	750	484
Other meats.	162	143	166	145	20
Sugar.	1,716	2,450	2,804	3,220	3,251
Molasses, inedible	772	359	303	627	269
Bran, shorts, middlings, etc.	432	571	499	510	236
Other agricultural products.	862	542	431	671	1,016
Total.	15,745	13,407	12,697	12,866	13,177

Source: U.S. Bureau of the Census.

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COST OF THE COMMON AGRICULTURAL POLICY TO THE EUROPEAN COMMUNITY

by
George R. Kruer and Byron Berntson

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Introduction

That European consumers and taxpayers bear the cost of the EC's Common Agricultural Policy (CAP) is evident from the higher prices they pay for food in relation to world price levels and from the taxes they pay to support EC agriculture. This report presents an estimate of annual total CAP costs by summing three items. The first two are budgetary and include (1) national and state expenditures by EC governments in support of domestic agriculture and (2) expenditures by the Community's European Agricultural Guidance and Guarantee Fund (FEOGA). The third group consists of excess food costs paid by consumers for CAP-organized commodities produced domestically at prices above those in the world market.

As shown by table 1, the three cost items total an estimated $14.4 billion. The breakdown is as follows: $5.5 billion comes from national agricultural budgets, $2.4 billion is estimated FEOGA expenditure, and $6.4 billion is excess consumer costs not included in FEOGA expenditures.

Budgetary Costs

National agricultural expenditures not reimbursable from FEOGA consist primarily of subsidies on non-CAP commodities, tax rebates, grants, or loans for structural improvement, and administrative expenses.

Because one-source budget figures were not available for all Member States, there is undoubtedly a comparability gap in the figures presented. The most complete figures are probably those for Germany, France, Italy, and the Netherlands. Budget figures more recent than 1967 were not available for Italy. (Tables 2-6 contain budget breakdowns for each country except Luxembourg.)

The budgets were adjusted to avoid double-counting of FEOGA expenditures. It was assumed that the Belgian, German, and French budgets included gross receipts from FEOGA. Receipts from and contributions to FEOGA are excluded from the Italian budget. For the Netherlands, FEOGA receipts and contributions were already netted out in the Farm Equalization Fund figure, yielding a net receipt which was subsequently subtracted from the

1/ International Monetary and Trade Research Branch, Foreign Development and Trade Division, Economic Research Service.

Table 1.--Cost of the Common Agricultural Policy to the European Community

Cost group	Amount	
	Mil. dol.	
National agricultural budgets, European Community Member States:		
Belgium (1968)	89	
Netherlands (1968)	241	
Germany (1969)	1,234	
France (1969)	2,665	
Italy (1967)	1,275	
Luxembourg (1969)	1/13	
Total		5,517
1968/69 estimated FEOGA Expenditures:		
Guarantee Section	2,010	
Guidance Section	285	
Special Section	138	
Total		2,433
Excess consumer costs on domestically produced and consumed commodities:		
Soft wheat	706	
Durum wheat	64	
Barley	25	
Rye	44	
Rice	9	
Sugar	860	
Eggs	281	
Poultry	254	
Pork	839	
Beef and veal	1,950	
Butter	1,335	
Nonfat dry milk	23	
Whole dry milk	47	
Cheese	406	
Olive oil	36	
Subtotal	6,879	
Less: double counting of excess cost of feed grain imports	434	
Excess consumer costs		6,445
Grand total cost		14,395

1/ It is assumed that this total does not include gross receipts from FEOGA. The source for this figure is Dept. of State Airgram A-001, Luxembourg, Jan. 8, 1969.

total. It was assumed that Luxembourg's budget did not include an estimated $8-10 million of gross receipts from FEOGA.

FEOGA reimburses Member State governments through its Guarantee Section for expenditures on export subsidies and internal market intervention. Its Guidance Section provides grants for structural improvement of production and marketing. For the 3 years ending 1969/70, FEOGA also has a Special Section which compensates grain producers in Germany, Italy, and Luxembourg for income losses following the grain price reductions of July 1, 1967.

The FEOGA budget is financed in part by variable levies collected on agricultural imports and in part by contributions assessed on the Member States. Levies financed an estimated 40 percent of the Guarantee Section in 1968/69. The remainder came from assessments on the Member States according to a fixed percentage scale. Both the Guidance and Special Sections are financed by contributions on a percentage scale.

Determining Excess Consumer Costs

To avoid double-counting the import levies which are included in FEOGA expenditures, the following procedure was used in determining the excess expenditures on food by consumers owing to the CAP:

> As a rule, only the quantity of an item under a CAP which is both domestically produced and consumed in the EC enters the calculation. Imports are excluded because the excess cost to consumers of imported commodities is equal to levy receipts and therefore used to finance the already counted FEOGA expenditures. Exports are excluded from the computation since export subsidy costs are included in FEOGA or national budget expenditures, or both. Thus, excess consumer expenditure is calculated by multiplying domestic production minus exports by the EC producer price minus the world price. However, this means the excess cost of any domestic production used as an input to another CAP product, mainly grain used as feed, would be counted twice.

Table 2.--Belgium, proposed national budget for agriculture, 1968

Item	Estimated expenditures
	--Million dollars--
Aids to--	
Crop production	70
Animal production	59
Scientific research	10
Other 1/	81
Subtotal	220
Minus gross receipts from FEOGA 2/	131
Total	89

1/ Breakdown unavailable.
2/ It is assumed that Belgium's 1968/69 net contribution to FEOGA is not included in the total, but that gross receipts are included.

SOURCE: Annuaire Statistique de la Belgique, Institut National de Statistique, vol. 88, 1967, p. 399.

Table 3.--The Netherlands, national budget for agriculture, 1968

Item	Estimated expenditures
	--Million dollars--
General expenditures	15
Deficit on Farm Equalization Fund	48
Development and Reorganization Fund	14
Research	17
Education	42
Land development	77
Advisory service	13
Veterinary service	11
Forestry	9
Plant protection	3
Fisheries	4
Miscellaneous	18
Subtotal	271
Minus net receipts from FEOGA 1/	30
Total	241

1/ Net receipts from FEOGA are included in the Farm Equalization Fund figure.

SOURCE: Agriculture Abroad, Canada Department of Agriculture, vol. 22, No. 6, Dec. 1967, pp. 20-21.

Table 4.--France, proposed national budget for agriculture, 1969

Item	Estimated expenditures
	--Million dollars--
Administration	166
Economic measures	1,512
Social measures	1,354
Reduction of interest	3
Investment	514
Subtotal	3,549
Minus gross receipts from FEOGA 1/	884
Total	2,665

1/ It is assumed that the total includes gross receipts from FEOGA.

SOURCE: Rapport General ... sur le projet de loi de finances pour 1969, vol. III, app. No. 6, doc. No. 40 of the French Senate, 1st ordinary session, 1968-69, pp. 27-28.

Table 5.--Italy, national agricultural budget, 1967 1/

Item	Estimated expenditures
	--Million dollars--
Ministry of Agriculture	923
Ministry of Health, livestock health problems	14
Ministry of Public Works, reclamation, etc.	144
Cassa del Mezzogiorno	101
Regional governments	93
Total	1,275

1/ Assumed to exclude receipts from and contribution to FEOGA.

SOURCE: Annuario dell'Agricoltura Italiana, vol. 21, 1967, Instituto Nationale di Economia Agraria, Rome, 1968.

Table 6.--Germany, proposed budget for agriculture, 1969

Item	Estimated expenditures
	--Million dollars--
A. Federal Budget:	
Improvement of agricultural structures	281
Modernization of farm operation	30
Social welfare	181
Rationalization of marketing	52
Improvement of farm income	196
Support of fisheries	8
Other support measures	110
Intervention and similar measures	249
Export subsidies	98
Other subsidies	156
Administration and research	33
Total	1,394
B. Laender (State) Budgets	250
C, Tax Reductions for Agriculture	120
Subtotal	1,764
Minus gross receipts from FEOGA 1/	530
Total	1,234

1/ The total does not include Germany's 1968/69 net contribution to FEOGA but it is assumed to include gross receipts.

SOURCE: Federal budget - FAS Dispatch, GY-9007, Bonn, Jan. 27, 1969. Laender budgets - Bericht der Bundesregierung ueber die Lage der Landwirtschaft. Bonn, Feb. 7, 1969, p. 103. Tax reductions - Statistisches Jahrbuch uber Ernahrung, Landwirtschaft und Forsten, 1968, Federal Ministry of Food, Agriculture, and Forests, Bonn, 1968, p. 225.

Therefore, for those products with significant use as an input, the quantity to which the price differential is to be applied is industrial plus human use less imports. It is assumed that all imports are for these two uses. This is a back-handed way to get the quantity of a commodity that represents final domestic human and industrial consumption out of domestic production.

This analysis assumes that marketing margins from the producer to the consumer are the same in absolute terms, not percentage terms. That is, consumer prices reflect the same absolute margin no matter which producer price is used, the current EC one or the world price. The rationale is that the marketing margin is determined by the factor costs involved in providing the services. If it is assumed that marketing costs could be reduced so that they represented the same percentage markup, calculations based on the same data suggest that excess consumer costs would be over $9 billion more. However, this assumption is rejected in favor of the apparently more reasonable one that marketing margins would be the same in absolute terms.

This procedure also assumes that the EC would be able to produce or import all of its needs at current world prices if the CAP's were abolished. This may be true for some commodities, but certainly not all of them. For example, if the EC entered the world market to buy all of its sugar, there is little doubt that the world price of sugar would increase in the short run and probably the long run. However, we have not adjusted the world price. Our price differential is straightforward -- the actual EC producer price less the actual world price.

Nevertheless, an analysis was carried out for each commodity to determine if abolition of the CAP's would have a significant effect on world prices. In summary, for only two commodities -- sugar and beef and veal -- can it be said that the price differentials used, and thus the excess consumer costs, are overstated. For sugar, the overstatement may be around one-third of the differential used, which would mean the excess costs used are overstated by about $280 million. No firm price increase is ventured for beef and veal. But suppose that world prices increased by 20 percent from the level used of $388.20 per metric ton. Then the price differential would decline by $77.64 per ton and the excess consumer costs by $520 million.

In most cases the time period of both prices is 1967/68. It was chosen because price data were readily available and, more importantly, because it was the first full year of operation for several major commodity groups under the unified CAP system. Quantity data are for 1966/67 (the most recent available for most commodities) except that 1967 was used for eggs. This means the cost is probably understated since 1967/68 was another year of record production. Table 7 shows the quantities and prices used in deriving excess consumer costs by commodity.

Since the excess cost of imported feed grains is in FEOGA and in the final excess cost of livestock, an adjustment was made to reduce gross excess consumer costs by this amount (See bottom of table 1 and table 7.) Oats and corn were not included since virtually all production is used as an input to the livestock sector. Because sunflower and rapeseed producers receive deficiency payments, which are in FEOGA, all oilseeds and products enter at world prices. Therefore, sunflower and rapeseed production was excluded from the calculation. Fruit and vegetable production has received only minimal protection through higher prices and so was not included.

Table 7.--Quantity and price details used in deriving excess consumer costs

Commodity	Produc- (1)	Exports (2)	Imports (3)	Human use (4)	Indus- trial (5)	Cols. used to get Col. 7 (6)	Quantity used to get con- cost (7)	EC price per metric ton (8)	World price per metric ton (9)	Differ- ence per metric ton (10=8-9)	Excess consumer costs (11=7x10)
	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons		1,000 metric tons	Dollars	Dollars	Dollars	1,000 dollars
Soft wheat	24,507	4,358	2,790	17,029	52	4+5-3	14,291	107.30	57.90	49.40	705,975
Durum wheat	1,802	121	1,490	2,873	0	4+5-3	1,383	1/126.64	80.70	45.94	63,535
Barley	12,366	1,211	1,875	120	2,816	4+5-3	1,061	80.28	56.70	23.58	25,018
Rye	3,475	29	265	1,368	103	4+5-3	1,206	93.75	57.48	36.27	43,742
Rice	578	165	312	611	74	2/1-2	326	179.60	153.40	26.20	8,541
Sugar	5,568	643	985	---	---	3/1+3-2	5,910	223.50	78.00	145.50	859,905
Eggs	2,265	---	---	---	---	1	2,265	511.40	387.50	123.90	280,633
Poultry	1,496	26	68	---	---	1-2	1,470	723.30	550.00	173.30	254,751
Pork	4,794	131	---	---	---	1-2	4,663	567.10	387.10	180.00	839,340
Beef & veal	6,804	120	---	---	---	1-2	6,684	680.00	388.20	291.80	1,950,391
Butter 4/	1,247	72	9	1,145	---	4	1,145	1,874.40	708.50	1,165.90	1,334,956
Nonfat dry milk	---	---	35	122	5	4+5-3	92	412.48	165.34	247.14	22,737
Whole dry milk	---	---	20	133	0	4+5-3	113	863.10	443.12	419.98	47,458
Cheese	1,855	109	111	---	---	1-2	1,746	865.00	632.50	232.50	405,945
Olive oil	353	19	108	465	7	1-2	334	1/806.20	698.40	107.80	36,005
Subtotal											6,878,932
Less: 5/											
Corn & sorghum	---	---	12,844	---	---	3	12,844	90.10	56.30	33.80	434,127
Excess consumer costs											6,444,805

Note: All quantity data are for 1966/67 except eggs which are calendar year 1967. Reference period for price data varies according to commodity but is mostly for 1967/68.

--- Not necessary for calculation or is insignificant.

1/ Excluding a deficiency payment of $34.76 for durum wheat and $350 for olive oil.

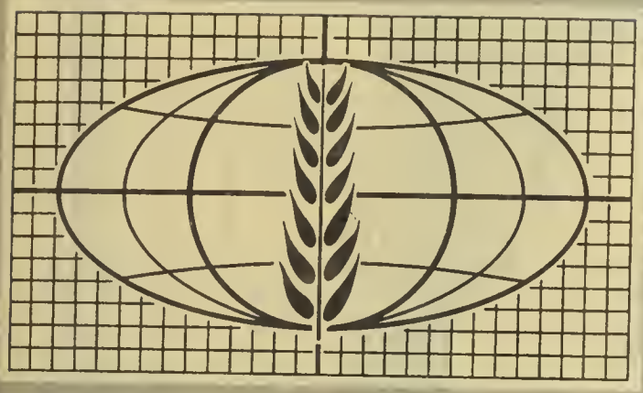
2/ Times a factor of 0.79 for husking.

3/ Treated differently because of French production in overseas areas.

4/ Butterfat tonnage converted to butter by multiplying by a factor of 1.16 (but this factor might be as high as 1.20).

5/ Necessary to avoid double-counting excess cost of feed grain imports used as an input to the livestock sector.

International Monetary & Trade Research Branch, FDTD, ERS.



UPPER VOLTA'S AGRICULTURAL ECONOMY IN BRIEF

By Snider W. Skinner

ERS-FOREIGN 285 FOREIGN REGIONAL ANALYSIS DIVISION JANUARY 1970

SUMMARY

Upper Volta, hindered by lack of rainfall and by its landlocked position in West Africa, nevertheless is showing some signs of economic progress. Livestock production, Upper Volta's chief economic activity, needs modernizing. Cotton production has risen sharply in recent years, but peanut production has remained about the same. Prospects for commercial production of sugar from sugarcane appear bright.

Upper Volta's foreign trade is small and has shown an adverse balance each year since the country became independent from France in 1960. Ivory Coast, Ghana, and France are Upper Volta's chief markets. France and Ivory Coast are the chief suppliers. Trade with the United States is small. Upper Volta is relatively self-sufficient in food. This is a major accomplishment. However, from time to time, Upper Volta suffers from droughts which cause local or widespread famine conditions.

POPULATION

Upper Volta's population, as of 1969, was estimated at 5.3 million. The average population density is 50 persons per square mile but is unevenly distributed. The central plateau has about one-fourth of the land area and nearly one-half of the population. The north, southeast, and southwest are less heavily populated. Population growth is estimated at 2 percent per year. Approximately 95 percent of the inhabitants live in rural areas.

Upper Volta has no large cities. Ouagadougou, the capital, has a population of 105,000. About 65,000 persons live in Bobo Dioulasso, the largest commercial center. Other urban centers include Koudougou (21,000), Kaya (10,000), Ouahigouya (10,000), and Banfora (5,000). There are 7,000 villages, with an average population of 600.

Almost all of Upper Volta's population is African. Very few inhabitants are from Europe, Asia, or the Americas.

The dominant ethnic group is the Mossi. Many of the other tribes have adopted the customs and language of this influential tribe. Domination by the Mossi predates the coming of the French. In 1950, the French decided to make Ouagadougou the capital of Upper Volta as it was the traditional seat of the Mossi "emperor."

U.S. DEPARTMENT OF AGRICULTURE

NEG. ERS 6949-69(8) ECONOMIC RESEARCH SERVICE

LAND CHARACTERISTICS AND USES

Upper Volta has a total land area of 105,839 square miles, slightly larger than Colorado. It is bounded on the north and west by Mali, on the east by Niger, and on the south by Ivory Coast, Ghana, Togo, and Dahomey.

It is located in the Sudanese climatic zone, which is characterized by a 4-month rainy season from July through October and a dry season the other months of the year. Annual rainfall averages 40 inches in the south, gradually decreasing to less than 10 inches in the north.

The most extensive soils in Upper Volta are Ferruginous, iron-rich, tropical soils (Fersiallitic soils), formed from the crystalline acid rock base which still underlies them. These reddish soils are very erodible; annual crops grown on them afford little protection against erosion. Although of low-to-average agricultural value, many of these soils respond well to fertilizer.

The topography of the country can be described as a vast undulating plain interspersed with occasional rocky areas. All of Upper Volta slopes toward the south, except for a portion that drains eastward to the Niger River.

Rainfall in the southern part of Upper Volta is sufficient to produce several rivers. The Volta Blanche, Volta Rouge, and Volta Noire flow southward into Ghana, where they are called the White, Red, and Black Volta Rivers, and ultimately into the Gulf of Guinea. The Leraba, Komoe, and Oti Rivers also flow into the Gulf of Guinea. Even in the drier east, the Sirba River forms and flows northeastward to the Niger River. The small Gorouol and Tapoa Rivers also flow into the Niger.

Upper Volta's rainfall, temperature, and topography are moderately favorable to growing of crops with low rainfall requirements and to grazing of livestock. Agricultural activities are distributed throughout most of Upper Volta, with the exception of the northern area where the harmattan (hot desert wind) adds to the dryness of the region, resulting in sparse human and animal populations.

AGRICULTURAL STRUCTURE

Livestock herding and subsistence crop production are the chief agricultural pursuits in Upper Volta. Some commercial crops--chiefly peanuts and cotton--are grown. The agricultural pattern is largely determined by the amount of rain that falls. Farms are usually small, and cropland is usually cultivated with hand tools. Because of the short rainy season, quick-maturing crops must be planted.

Herdsmen move with their cattle in search of water and grass, especially in the northeast. Land tenure is based on occupancy rights and is generally regulated by tribal custom and law.

PROGRESS IN FARM TECHNOLOGY

Farm technology in Upper Volta is rather primitive but some progress is being made.

Several French organizations have an important part in rural development in the country, channeling French economic and technical assistance to Upper Volta's farmers (including livestock raisers). Their work is detailed in the following paragraphs.

CFDT (Compagnie Francaise pour le Developpement des Fibres Textiles--French Company for the Development of Textile Fibers) was formerly concerned in Upper Volta only with cotton production and marketing. Recently CFDT has been given broader responsibility for agricultural development in two rural development regions.

CFDT's cotton research is conducted in cooperation with IRCT (Institut de Recherches du Coton et des Textiles Exotiques--Research Institute for Cotton and Exotic Textiles). Both CFDT and IRCT are financially supported by FAC (Fonds d'Aide et de Cooperation--Funds for Aid and Cooperation).

In the areas where considerable cotton is grown, CFDT distributes improved seed of the Allen type, fertilizers, and insecticides, and provides training and technical assistance to farmers. In the regions it serves, CFDT buys cotton on a monopoly basis and ships the seed cotton to its gins

which are located in Ouagadougou and Bobo Dioulasso.

In the areas of Upper Volta where peanuts are grown, technical assistance is provided by the French organization, IRHO (Institut de Recherches pour les Huiles et Oleagineaux Tropicaux--Research Institute for Tropical Oils and Oil-bearing Materials). IRHO conducts an agricultural research station at Niangoloko, southwestern Upper Volta.

Technical assistance to small farmers in the Mossi area near Ouagadougou is provided by a French organization, SATEC (Societe d'Assistance Technique et de Credit Social Outre-Mer--Society for Overseas Technical Assistance and Social Credit). SATEC has promoted use of fertilizers, establishment of cash crops in subsistence areas, introduction of plowing with animal power, diversification of crops, crop rotation, and introduction of livestock farming in conjunction with crop farming. FAC provides the funds for SATEC. Recently, SATEC was given responsibility for administering two rural development regions.

Two general agricultural experiment stations are maintained by IRAT (Institut de Recherches d'Agronomie Tropicale--Research Institute in Tropical Agronomy). These stations are at Sarya and Farakoba.

SESU (Societe d'Etude Sucriere de Haute Volta--Society for Study of Sugar in Upper Volta), supported by FAC, has been conducting sugarcane experiments preparatory to the establishment of a commercial sugar industry at Banfora.

BDPA (Bureau de Developpement de la Production Agricole--Bureau for Development of Agricultural Production) is working to improve Voltan agricultural methods. BDPA is also in charge of a recently established rural development region.

Five proposed rural development regions are still to be organized.

CIDR (Compagnie Internationale de Developpement Rural--International Company for Rural Development) promotes farm diversification in certain rural areas of Upper Volta. It is financed by a French religious organization.

U.S. economic and technical assistance to Upper Volta has been small. In the agricultural field, the main projects have been the institution of a livestock demonstration center and the construction of small dams to supply drinking water for people and livestock.

Project Vanguard rice demonstration plots, organized at three locations in Upper Volta by Nationalist China (Taiwan), have been quite successful.

During 1959 to 1965, Upper Volta received economic and technical assistance totaling $132 million. Of this amount, France furnished 61 percent; the European Development Fund, 23 percent; Ghana, 4 percent; the United States, 4 percent; the United Nations, 4 percent; the Entente Solidarity Fund, 3 percent; West Germany, 1 percent; and Israel and Nationalist China, smaller percentages.

On a per capita basis, foreign aid to Upper Volta has not been as large as that furnished many other countries in Africa.

AGRICULTURAL PRODUCTION

Peanuts and cotton are Upper Volta's main cash crops, but exports of these crops are low in relation to the size and farm population of the country. Sorghum and millet are the dominant food crops grown; others include corn, bambarra groundnuts, cowpeas, rice, cassava, yams, sweetpotatoes, and cocoyams.

A sugar refinery was started at Banfora in January 1969, and maximum production of 15,000 metric tons of sugar is expected by 1977. This refinery will require growing of sugarcane on a scale not previously attempted in Upper Volta.

There was drought in 1968 in the inland countries of Africa; therefore, the 1968 production figures in table 1 are somewhat below those for other recent years.

Raising of cattle, goats, and sheep is an important source of both revenue and food (table 2). This contrasts with the situation in Upper Volta's neighbor countries to the south, which are wetter and more tropical. In these coastal countries,

Table 1.--Upper Volta: Estimated production, major crops, 1959-61 average, annual 1967 and 1968

Crop	Production		
	Average 1959-61	1967	1968
	1,000 metric tons		
Millet and sorghum	874	950	925
Corn	129	150	140
Peanuts, in shell	75	109	100
Bambarra groundnuts	66	70	70
Cowpeas	63	65	60
Rice, paddy	24	35	35
Cassava (manioc)	29	30	30
Yams	25	25	25
Sweetpotatoes	20	20	20
Shea nuts	20	20	5
Cottonseed	5	9	16
Cotton lint	3	5	8
Cocoyams	3	3	3
Sesame seed	1	3	3

Table 2.--Upper Volta: Estimated livestock numbers, 1966

Kind	Number of livestock
	1,000 head
Sheep and goats	3,000
Cattle	2,400
Donkeys and horses	300
Hogs	110

infestations by tsetse flies, which transmit the disease trypanosomiasis, make livestock-raising precarious and unprofitable. These countries thus furnish a market for Upper Volta's livestock production.

Large herds of cattle are driven from Mali and Niger, through Upper Volta, on their way to markets in Ivory Coast and Ghana, often spending several months in crossing Upper Volta.

Large numbers of live cattle are shipped by rail from Upper Volta to the Ivory Coast. In 1964, 10,000 tons of cattle were shipped by rail, representing about 60 percent of registered cattle exports that year, but of course, a much smaller percentage of total cattle exports.

Some meat is also sent to Abidjan from animals slaughtered in Ouagadougou. A new abattoir, to increase these meat exports, is planned.

The southern part of Upper Volta has some tsetse fly infestation; the main cattle breed there is the Ndama, which is tsetse fly resistant. The Ndama are raised on a sedentary basis. Further north and east, where transient herds of Zebu cattle are predominant, Upper Volta is free of the fly.

Development of modern commercial cattle ranching appears to be one of the few opportunities for economic development open to Upper Volta.

AGRICULTURAL TRADE

About 90 percent of Upper Volta's total exports are agricultural. Live animals, chiefly cattle, are the largest single export, making up about three-fifths of all exports (table 3). Most of the live animals are driven across the border and purchased in the neighboring countries of Ivory Coast and Ghana (table 4).

Exports of crops are relatively small. Cotton, peanuts, sesame, and shea nuts are

Table 3.--Upper Volta: Agricultural exports, value and distribution of principal commodities, 1967

Commodity	Value	Percentage of total value of all exports
	1,000 dollars	Percent
Live animals 1/	13,252	60.3
Cotton	3,411	15.5
Peanuts	1,148	5.2
Meat and fish	1,057	4.8
Sesame seeds	476	2.2
Hides and skins	312	1.4
Shea nuts	277	1.3
Shea butter	49	.2
Other exports (agricultural and non-agricultural)	2,012	9.1
Total exports	21,994	100.0

1/ Includes 1 billion CFA francs value of estimated unregistered live animal exports. The CFA franc, Upper Volta's currency, is converted at the rate of 246.853 CFA francs per U.S. dollar.

Table 4.--Upper Volta: Exports by country, value and distribution, 1967

Country	Value	Percentage of total value of all exports
	1,000 dollars	Percent
Registered exports:		
Ivory Coast	8,851	49.3
Ghana	2,435	13.6
France	2,431	13.5
Morocco	656	3.7
Italy	567	3.2
Japan	486	2.7
Mali	429	2.4
Niger	288	1.6
Dahomey	251	1.4
Other countries	1,549	8.6
Total	17,943	100.0
Estimated unregistered live animal exports	4,051	
Total exports	21,994	

the chief export crops. In recent years, cotton exports have increased greatly.

Although total value is not large ($36 million in 1967), Upper Volta's imports exceed the country's exports by a considerable margin and thus give the country an adverse balance of trade. Agricultural imports made up about a fourth of imports in 1967. The largest agricultural imports, by value, were of kola nuts, sugar, wheat flour, and live animals (table 5).

Upper Volta's trade with the United States is small. In 1967, exports to the United States were valued at only $7,300 and consisted mostly of African art. Upper Volta's imports from the United States in 1967 were valued at $879,000 (table 6), consisting mainly of Agency for International

Table 5.--Upper Volta: Principal agricultural commodities imported, value and distribution, 1967

Commodity	Value	Percentage of total value of all imports
	1,000 dollars	Percent
Kola nuts	2,078	5.7
Sugar	1,722	4.7
Wheat flour	1,507	4.1
Live animals	1,394	3.8
Tobacco	810	2.2
Rice	660	1.8
Dairy products and eggs	543	1.5
Fruits and vegetables	531	1.5
Other imports (chiefly nonagricultural)	27,092	74.7
Total imports	36,337	100.0

Table 6.--Upper Volta: Imports by country, value and distribution, 1967

Country	Value	Percentage of total value of all imports
	1,000 dollars	Percent
France	16,321	44.9
Ivory Coast	7,616	21.0
Mali	2,329	6.4
Senegal	1,280	3.5
West Germany	1,179	3.2
Italy	980	2.7
United States	879	2.4
Netherlands	725	2.0
Belgium and Luxembourg	681	1.9
Ghana	579	1.6
United Kingdom	344	.9
Japan	190	.5
Mainland China	138	.4
Other countries	3,096	8.6
Total imports	36,337	100.0

Development supplies and agricultural commodities furnished under U.S. Public Law 480.

GENERAL FOOD SUPPLY SITUATION

The diet of the people of Upper Volta is based on millet and sorghum. Although rather starchy in composition, the diet does include animal products to a greater degree than do those of the inhabitants of most of tropical Africa.

The country is largely self-sufficient in food production, importing only a small amount of sugar, dairy products, wheat flour, and bakery products. Perhaps this relative self-sufficiency in food can be counted as one of Upper Volta's major accomplishments. However, Upper Volta does suffer from recurring food shortages, at the end of the dry season and during the rainy season before crops are mature. The country needs a workable "ever-normal granary" plan.

AGRICULTURAL AND TRADE POLICY

In June 1967, the Government issued the general guidelines for its 1967-70 National Plan. According to these guidelines, the Government will: Stress development in the rural sector (the largest); maintain but not increase government spending in the social sector (health and education); and seek further foreign assistance.

The Plan emphasizes development of the rural sector, which in 1964 accounted for 66 percent of the country's gross national product. It is hoped that an extension agent will be placed in each of the 7,000 Voltan villages to provide assistance to those running the 500,000 farm units. The Government acknowledges that it will take 10 to 15 years for such an extension program to become operative. It may be an ideal difficult of attainment.

Prices to farmers are fixed by the Government for oil crops, subsistence crops, and cotton. For the 1966/67 season, Government purchase prices per pound for oil crops delivered to Ouagadougou were as follows:

	Cents, U.S.
Shelled peanuts	4.9
Unshelled peanuts	2.9
Shea nuts (karite)	1.3
Sesame	4.9

When these products are delivered to Bobo Dioulasso, purchase prices are slightly higher. For producing areas other than those near Ouagadougou and Bobo Dioulasso, these prices are discounted to reflect transportation differentials.

Subsistence grains were purchased at the following prices per pound:

	Cents, U.S.
Grain sorghum	1.7
Millet	1.7
Corn	1.8
Rice	2.9 to 4.6

Seed cotton was purchased at 6.2 cents a pound for "Allen" cotton and 5.5 cents for second-quality cotton.

Industrial crops are purchased, graded, packaged, and exported through state marketing agencies or agencies designated by the state. At one time, France annually purchased fixed quantities of Upper Volta's cotton and peanuts at prices above those on world markets. Upper Volta has a complex tariff system which favors France, other franc zone countries, and other members of the European Community.

GENERAL ECONOMIC SITUATION

In general, Upper Volta's economy is at quite a low level, but something of an upward trend has been detected within the past few years. Gross national product in 1967 was estimated at $253 million, or $50 per capita.

The Abidjan-Niger railroad is Upper Volta's rail outlet to the Atlantic Ocean. By rail, it is 730 miles from the inland terminus at Ouagadougou to Abidjan, the Ivory Coast's main ocean port. Of this mileage, 341 miles are in Upper Volta. The railroad also passes through Bobo Dioulasso.

The railroad may be extended from Ouagadougou to Dori, a distance of 219 miles, depending upon whether a decision is made to exploit extensive manganese deposits near Tambao. The United Nations has furnished the money to study the feasibility of building the railroad and mining the manganese. The railroad could carry livestock, peanuts, and cotton, as well as manganese, from northeast Upper Volta.

A great need in Upper Volta's infrastructure is improvement of the country's road system. In 1962, only 40 miles of roads, in and near the cities, were paved. An additional 3,708 miles were surfaced with gravel or crushed stone. The remaining 6,632 miles are graded or unimproved. Road maintenance in Upper Volta is woefully inadequate.

With foreign economic assistance, certain important roads in Upper Volta are being improved. These include: Bobo Dioulasso to Mali border (financed by FED--Fonds Europeen de Developpement); Ouagadougou to Ghana border via Po (financed by FED); Ouagadougou to Fada Ngourma, with extensions to Niger, Togo, and Dahomey (feasibility study by FAC); and Ouagadougou to Bobo Dioulasso (feasibility study by FAC).

Air transportation is of minor use to Upper Volta agriculture as little or no use is made of air freight to ship the products of Voltan fields and grasslands. None of Upper Volta's rivers are navigable to the sea.

Gold had long been mined in Upper Volta, but the small gold mine at Pourra closed in 1966.

Test borings at Tambao, near Dori, in northeastern Upper Volta, indicate manganese deposits of at least 10 million tons, enough to be mined profitably. However, no decision has been made to go ahead.

While manufacturing is not extensive in Upper Volta, the country does have some industry, including: cotton ginning, oil pressing, soap making, rice shelling, animal slaughter, tanning, brewing, bottling of soft drinks, assembling of bicycles, clothing manufacturing, metal working, printing, baking, candymaking, woodworking, and furnituremaking.

The VOLTEX textile plant at Koudougou, funded by the European Development Fund, was scheduled to begin operating in 1969. A shoe factory at Ouagadougou costing between $245,000 and $408,000, was scheduled to be in full operation before the end of 1969. Upper Volta's present oil-processing plant will be replaced in late 1971 by a 20,000-ton capacity plant at Bobo Dioulasso. Peanuts, cottonseed, and shea nuts will be crushed.

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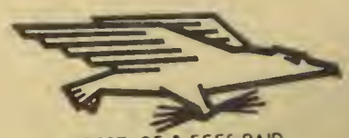

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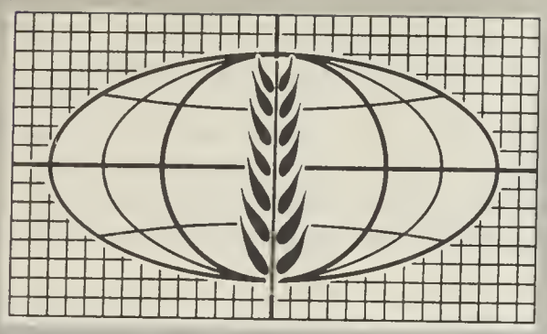

Agriculture in the United States and the Soviet Union:

A STATISTICAL COMPARISON

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By Jerome A. Levine and Paige I. Bryan

S-FOREIGN 286 FOREIGN REGIONAL ANALYSIS DIVISION DECEMBER 1969

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This statistical study compares the structure, resource allocation, and performance of agriculture in the United States and the Soviet Union. These indicators provide, at best, only general guidelines for judging agricultural performance. Data on geographic and climatic conditions, soil, farm management techniques, and institutional and political factors are not presented, but are reflected in the comparative tables.

The main Soviet farm area extends farther north than the U.S. grain belt; the Ukraine is at a latitude approximately the same as the spring wheat belt in the northern United States and Canada. This latitudinal position, coupled with low precipitation, results in a capricious climate that is sometimes severe and dry. These geographic factors have sharply limited the expansion of Soviet farm output since the growing and pasturing seasons are short and crop yields are low and unstable.

Land ownership is basically different in the United States and the Soviet Union. All land in the USSR is Government-owned and nearly all is socialized. The functions of agricultural production are guided by a central state plan operating through a complex of large collective farms, state farms, and auxiliary farm units attached to state enterprises. The collective farms occupy over half the total sown acreage; most of the remaining acreage is in state farms. The private sector, about 3 percent of total agricultural land, consists mainly of small plots tilled by collective and state farm members in their spare time. About one-third of total agricultural production comes from these plots, and the produce is either consumed by the farmers' families or sold to the state or through farmers' markets. American farms are small by comparison with Soviet complexes; most U.S. farms are operated by the farmowner and his family, sometimes with one or two hired workers.

The functions of management are difficult to compare because of differences in the size of Soviet and American farms. Soviet collective farm chairmen and state farm directors probably bear the closest resemblance to managers of American corporate-type farms. However, Soviet farm managers are not fully responsible for making economic decisions directly affecting the output and profits of the enterprises. Often they must respond to directives

rather than make independent decisions. Recent Soviet interest in cost accounting and in profitable farm operations suggests a trend toward more managerial autonomy in the actual production process. Pricing of farm products, however, remains in the Soviet Government's domain rather than as a function of consumer demand. The U.S. Government helps shape the broad activities of production, marketing, pricing, and trade through extension services, support of farm prices and income, and foreign trade expansion. With minor exceptions, U.S. farmers make onfarm decisions.

The present Soviet regime is increasing the level of inputs and improving incentives of the rural labor force. These measures include financial concessions to farmers, increased supplies of fertilizers and pesticides, and expanded irrigation and drainage projects.

Although the Soviets have recently narrowed the gap between the USSR and the United States in many areas of agricultural efficiency, production, and performance, numerous deficiencies are still evident in the following tables. The United States, in comparison, uses less labor and land but more capital to achieve greater output. Farm efficiency, measured in terms of output per unit of input, is substantially higher in the United States than in the USSR for land, livestock, and labor. Yields of most crops are lower in the USSR than in the United States.

Foreign trade in farm commodities is far more important for the United States, the world's largest exporter and second largest importer of agricultural products, than for the Soviet Union. Both countries have adequate food supplies, in terms of calories per person, but structure of the respective diets differs greatly. The Soviet diet contains a high proportion of cereal products and potatoes, whereas the U.S. diet is high in vegetables, fruits, and foods of animal origin.

A comparison of Soviet and U.S. agriculture for a single year may be misleading because of the vagaries of weather. In 1966, almost ideal weather conditions in both the winter and spring grain regions of the USSR resulted in output far above its previous record of 1964. The United States, however, experienced several periods of adverse weather in 1966 that, along with reduced planted acreage, resulted in a slight decline from its 1965 record output of grains.

In 1967, adverse weather in all major grain growing regions of the USSR held both winter and spring grain output down. The United States, which harvested its largest acreage since 1960, produced a record crop. Timely rains and ideal temperatures in many regions produced average crop yields that were the second highest of this decade.

For a review of the current situation in Soviet agriculture, consult:

The Agricultural Situation in Communist Areas: Review of 1968 and Outlook for 1969. Econ. Res. Serv., U.S. Dept. Agr., ERS-Foreign 259, Apr. 7, 1969.

Agricultural Policies in Europe and the Soviet Union. Econ. Res. Serv., U.S. Dept. Agr., For. Agr. Econ. Rpt. No. 46, June 1968.

Table 1.--Agricultural resources, United States and Soviet Union, specified years

Item	Year	Unit	United States	Soviet Union	USSR as percentage of U.S.
					Percent
pulation, July 1	1967	Millions	1/197.1	2/235.5	119
vilian labor force (work experience)	do.	do.	3/88.2	4/120.1	136
nual average employment	do.	do.	5/74.3	4/112.2	151
nual average employment in agriculture	do.	do.	6/4.9	4/39.5	806
rm share of total employment (annual average)	do.	Percent	6.6	35.2	533
wn cropland	do.	Million acres	7/301	8/511	170
wn cropland per capita	do.	Acres	1.5	2.2	147
actors on farms, January 1	1968	Thousands	9/4,820	10/1,739	36
tor trucks on farms January 1	do.	do.	9/3,125	10/1,054	34
ain combines on farms	do.	do.	9/870	10/553	64
ricultural consumption of electricity	1967	Billion kwh.	11/29.0	12/25.8	89
e of commercial fertilizer in terms of principal plant nutrients:					
Total	do.	1,000 short tons	13/14,552	14/8,538	59
acre of sown area	do.	Pounds	97	33	34

1/ U.S. Dept. Commerce, Statistical Abstract of the United States 1968, 89th ed., h., D.C., 1968, p. 12. 2/ Computed from average of January 1 figures for 1967 and 8. 3/ U.S. Dept. Labor, Special Labor Force Report - "Work Experience in 1967," h., D.C., Dec. 1968. 4/ U.S. Dept. Commerce, Estimates and Projections of the Labor ce and Civilian Employment in the USSR, 1950-1975, Wash., D.C., June 1967, p. 15. Statistical Abstract ... op. cit., p. 221. 6/ U.S. Dept. Agr., Agricultural tistics of the United States, 1968, Wash., D.C., 1968, p. 446. 7/ Agricultural tistics ... op. cit., p. 451. 8/ USSR Central Stat. Directorate, Narodnoye zyaystvo SSSR, 1967, g., Moscow, 1968, p. 348. 9/ Agricultural Statistics ... op. ., pp. 441, 442. 10/ Narodnoye khozyaystvo SSSR ... op. cit., p. 456. 11/ USDA, t. Rept. Serv., Agricultural Prices, Wash., D.C., Nov. 29, 1968, p. 25. 12/ Narod- e khozyaystvo SSSR ... op. cit., p. 462. 13/ USDA, Stat. Rept. Serv., Consumption Commercial Fertilizers in the United States, Wash., D.C., June 1968, p. 8. Narodnoye khozyaystvo SSSR ... op. cit., p. 416.

Table 2.--Farm numbers and size, and selected data per farm, United States and Soviet Union, 1967

Item	Unit	U.S. farms	Soviet Union	
			Collective farms	State farms
Total	Number	1/3,146,000	2/36,200	2/12,783
Land area per farm	Acres	1/360	3/30,077	3/118,765
Sown area per farm	do.	4/95	5/7,031	6/17,050
Workers per farm	Number	7/1.6	8/418	9/618
Land area per worker 10/	Acres	225	72	192
Sown area per worker 11/	do.	59	17	28

1/ U.S. Dept. Commerce, Statistical Abstract of the United States, 1968, 89th ed., Wash., D.C., 1968, p. 594.
2/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, p. 325.
3/ Ibid., p. 342.
4/ Total sown area divided by number of farms.
5/ Narodnoye khozyaystvo SSSR ... op. cit., p. 466.
6/ Ibid., p. 483.
7/ Average annual employment in agriculture divided by number of farms.
8/ Narodnoye khozyzystvo SSSR ... op. cit., p. 467. Households per collective farm.
9/ SSSR v tsifrakh, 1967, Moscow, 1968, p. 92. Workers per state farm.
10/ Land area per farm divided by workers per farm.
11/ Sown area per farm divided by workers per farm.

Table 3.--Crop acreage, United States and Soviet Union, 1967

Crop	United States 1/	Soviet Union 2/	USSR as percentage of U.S.
	- - - 1,000 acres - - -		Percent
Corn, grain	60,557	8,611	14
Wheat	59,771	165,621	277
Rye	1,071	30,640	2,861
Oats	16,017	21,498	134
Barley	9,177	47,196	514
Sorghum grain in U.S., pulses in USSR	14,999	13,492	90
Rice	1,970	741	38
Cotton	7,997	6,034	75
Soybeans for beans	39,767	3/2,113	5
Sunflowers	4/216	11,779	5,453
Peanuts harvested for nuts	1,402	5/	---
Flax 6/	1,991	3,398	171
Sugarbeets	1,122	9,382	836
Sugarcane, for sugar and seed	628	5/	---
Tobacco	960	7/434	45
Potatoes	1,458	20,586	1,412
Sweetpotatoes	147	5/	---
Vegetables	8/3,564	9/3,531	99
Fruits (including citrus), grapes, berries, and nuts	10/3,095	11/6,042	195
Citrus	12/986	n.a.	---
Hay, all	13/64,667	14/86,979	135

1/ U.S. Dept. Agr., Stat. Rept. Serv., Crop Production, 1968 Annual Summary, Wash., D.C., Dec. 19, 1968, pp. 3, 4, unless otherwise noted. Area harvested. 2/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, pp. 348-367, unless otherwise noted. Area harvested. 3/ USDA, For. Agr. Serv., World Agricultural Production and Trade, Wash., D.C., Mar. 1969, p. 2. 4/ USDA estimate--Data are for Minn. and N. Dak. where most commercial production is located. 5/ Negligible. 6/ Flaxseed in the United States. Flax fiber in the USSR. 7/ USDA, For. Agr. Circ., FT 5-68, Wash., D.C., Dec. 1968, p. 2. 8/ USDA, Agricultural Statistics of the United States, 1968, Wash., D.C., 1968, p. 155. Commercial acreage only of 27 crops in the United States. 9/ Total acreage of all vegetables, except melons, in the Soviet Union. 10/ Agricultural Statistics ... op. cit., pp. 208, 232, 251. Total includes bearing area or commercial area harvested of 26 major fruits, grapes, berries, and nuts. 11/ Narodnoye khozyaystvo SSSR ... op. cit., p. 407. Bearing area. 12/ Agricultural Statistics ... op. cit., p. 208. Bearing area. 13/ Crop Production ... op. cit., p. 3. 14/ Narodnoye khozyaystvo SSSR ... op. cit., p. 348.

Table 4.--Yield per acre and production of major crops, United States and Soviet Union, 1967

Crop	Unit	Yield per acre		USSR as percentage of U.S.	Unit	Production		USSR as percentage of U.S.
		U.S. 1/	USSR 2/			U.S. 1/	USSR	
				Percent				Percent
Corn, grain	Bushels	78.6	36.6	47	1,000 bushels	4,760,076	3/314,946	7
Wheat	do.	25.9	14.2	55	do.	1,522,382	3/2,351,597	154
Rye	do.	22.6	15.4	68	do.	24,154	3/472,418	1,956
Oats	do.	49.3	30.8	62	do.	789,196	3/661,386	84
Barley	do.	40.6	20.1	50	do.	372,898	3/950,743	255
Sorghum grain in U.S., pulses in USSR	do.	50.4	16.0	32	do.	755,936	3/216,420	29
Rice, rough	Pounds	4,537	2,391	53	1,000 short tons	4,469	3/886	20
Cotton, lint	do.	447	4/742	166	1,000 bales	7,458	5/9,325	125
Soybeans for beans	Bushels	24.5	9.6	39	1,000 bushels	976,060	3/20,209	2
Sunflowerseed	Pounds	6/1,037	1,138	110	1,000 short tons	6/112	3/6,701	5,983
Peanuts harvested for nuts	do.	1,765	n.a.	---	do.	1,236	7/	---
Flaxseed	Bushels	10.1	8/5.1	50	1,000 bushels	20,036	8/20,905	104
Sugarbeets	Short tons	17.1	10.2	60	1,000 short tons	19,197	5/96,022	500
Sugarcane for sugar and seed	do.	42.5	n.a.	---	do.	26,651	7/	---
Tobacco		---	---	---	1,000 pounds	1,967,911	9/573,195	29
Fiber flax	Pounds	2,050	1,319	64	1,000 short tons	n.a.	5/535	---
Potatoes	do.	n.a.	315	---	1,000 cwt.	305,412	3/1,894,165	620
Sweetpotatoes	cwt.	209	92	44	do.	13,658	7/	---
Vegetables 10/	do.	93	n.a.	---	1,000 short tons	11/20,989	5/22,635	108
Citrus	Short tons	12/5.9	6.4	108	1,000 boxes	13/188,400	n.a.	---
Grapes	do.	14/12.4	n.a.	---	1,000 short tons	15/3,069	16/3,793	124
Total fruits (including citrus), grapes, berries, and nuts	do.	n.a.	n.a.	---	do.	17/20,795	16/9,883	47
Sugar production	---	---	---	---	do.	18/6,164	19/10,956	178
Hay	do.	20/1.95	21/.58	30	do.	20/126,300	21/50,706	40

1/ U.S. Dept. Agr., Stat. Rept. Serv., Crop Production, 1968 Annual Summary, Wash., D.C., Dec. 19, 1968, pp. 3-5, unless otherwise noted. Area harvested. 2/ Derived from production and area unless otherwise noted. 3/ USDA estimate. 4/ Entire area is irrigated. 5/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, p. 330. 6/ USDA estimate--Data are for Minn. and N. Dak. where most commercial production is located. 7/ Negligible. 8/ USDA, For. Agr. Serv., World Agricultural Production and Trade, Wash., D.C., Feb. 1969, p. 3. 9/ USDA, For. Agr. Circ. ... op. cit., p. 2. 10/ Commercial production of 27 crops in the United States; total output of all vegetables, except melons, in the Soviet Union. 11/ USDA, Agricultural Statistics of the United States, 1968, Wash., D.C., 1968, p. 155. 12/ Derived from production and area. 13/ Ibid., p. 89. Includes oranges, grapefruit, lemons, limes, tangerincs, tangelos. 14/ Crop Production ... op. cit., p. 37. Data for four major citrus fruits. 15/ Ibid., p. 4. 16/ Narodnoye khozyaystvo SSSR ... op. cit., p. 410. 17/ Crop Production ... op. cit., pp. 40-42. Includes 24 major fruits, grapes, berries, and nuts. 18/ Continental beets and cane, including Hawaii, Puerto Rico, and the Virgin Islands. 19/ Narodnoye khozyaystvo SSSR ... op. cit., p. 386. Production from domestic beets and imported Cuban raw sugar. 20/ Ibid., pp. 4-5. All hay. 21/ Narodnoye khozyaystvo SSSR ... op. cit., pp. 330-331. Sown area only.

n.a. = not available.

Table 5.--Livestock numbers, United States and Soviet Union, selected years

Livestock	Beginning of year	United States 1/	Soviet Union 2/	USSR as percentage of U.S.
		- - - Million head - - -		Percent
All cattle	1968	108.6	97.2	89
Cows	1968	3/50.0	4/41.6	83
Hogs	1968	54.3	50.9	94
Sheep	1968	22.1	138.4	626
Poultry	1967	5/336.7	516.2	153

1/ U.S. Dept. Agr., Agricultural Statistics of the United States, 1968, Wash., D.C., 1968, pp. 306-418.

2/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, pp. 425, 433.

3/ Cows, two years and older, included in cattle.

4/ All cows included in cattle.

5/ Chickens and turkeys only, excluding commercial broilers.

Table 6.--Production of livestock commodities, United States and Soviet Union, 1967

Commodity	Unit	United States	Soviet Union	USSR as percentage of U.S.
				Percent
Beef and veal	Mil. lb.	1/21,010	2/9,557	45
Pork	do.	1/12,550	2/7,440	59
Mutton, lamb, and goat	do.	1/650	2/1,764	271
Poultry meat	do.	3/8,108	2/1,764	22
Lard 4/	do.	2,076	2/1,820	88
Margarine and shortening	do.	5/5,340	6/1,376	26
Tallow and grease 4/	do.	5,332	2/490	9
Milk (cows)	do.	7/119,294	2/156,035	131
Butter	do.	8/974	6/2,337	240
Eggs	Billion	9/70.2	10/33.9	48
Wool 11/	Mil. lb.	12/228	10/871	382

1/ U.S. Dept. Agr., Agricultural Statistics of the United States, 1968, Wash., D.C., 1968, p. 354.
2/ USDA estimate.
3/ Agricultural Statistics ... op. cit., p. 142. Total production certified under Federal inspection.
4/ USDA, For. Agr. Serv., Foreign Agricultural Circular, FFO 13-68, Wash., D.C., Oct. 1968, pp. 28, 29, preliminary.
5/ Agricultural Statistics ... op. cit., pp. 141, 142.
6/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, p. 308.
7/ Agricultural Statistics ... op. cit., p. 376.
8/ USDA, Econ. Res. Serv., Dairy Situation, DS-325, Wash., D.C., May 1969, p. 20.
9/ Agricultural Statistics ... op. cit., p. 424.
10/ Narodnoye khozyaystvo SSSR ... op. cit., p. 434.
11/ Greasy basis.
12/ Agricultural Statistics ... op. cit., p. 346.

Table 7.--Area of major grains, United States and Soviet Union, average 1961-65, annual 1967

Item	Average 1961-65			1967		
	United States 1/	Soviet Union 2/	USSR as percentage of U.S.	United States 3/	Soviet Union 4/	USSR as percentage of U.S.
	- - 1,000 acres - -		Percent	- - 1,000 acres - -		Percent
eed grains:						
orn, grain	56,658	14,544	26	60,557	8,611	14
ats	21,162	17,989	85	16,017	21,498	134
arley	11,135	45,269	407	9,177	47,196	514
orghum grain and pulses 5/	12,131	19,657	162	14,999	13,492	90
4 feed grains	101,086	97,459	96	100,750	90,797	90
ood grains:						
heat	48,017	164,569	343	58,771	165,621	282
e	1,655	40,277	2,434	1,071	30,640	2,861
ckwheat	6/46	4,537	9,863	n.a.	4,258	---
ce	1,742	393	22	1,970	682	35
4 food grains	51,460	209,776	408	7/61,812	201,246	326
Total, 8 grains	152,546	307,235	201	7/162,562	292,043	180

1/ U.S. Dept. Agr., Stat. Rept. Serv., Crop Production, 1967 Annual Summary, Wash., C., Dec. 19, 1967, p. 36.
2/ USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1965, g., Moscow, 66, p. 284 and Narodnoye khozyaystvo SSSR, 1962, g., Moscow, 1963, p. 247.
3/ Crop Production, 1968 Annual Summary, Wash., D.C., Dec. 19, 1968, p. 3.
4/ Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, pp. 348-360.
5/ Sorghum grain for U.S., pulses for USSR.
6/ 1961-64 only.
7/ Excludes buckwheat in the U.S.

n.a. = not available.

Table 8.--Yields per acre of major grains, United States and Soviet Union, average 1961-65, annual 1967

Item	Average 1961-65			1967		
	United States 1/	Soviet Union 2/	USSR as percentage of U.S.	United States 3/	Soviet Union 2/	USSR as percentage of U.S.
	- - - Bushels - - -		Percent	- - - Bushels - - -		Percent
Feed grains:						
Corn, grain	66.3	25.2	38	78.6	36.6	47
Oats	45.2	20.3	45	49.3	30.8	62
Barley	36.2	17.9	49	40.6	20.1	50
Sorghum grain and pulses 3/	45.0	12.6	28	50.4	16.0	32
Food grains:						
Wheat	25.3	11.2	44	25.9	14.2	55
Rye	19.7	13.3	68	22.6	15.4	68
Buckwheat	4/19.5	7.1	36	n.a.	11.3	--
Rice	86.5	43.3	50	100.8	57.2	57
	- - - Pounds - - -			- - - Pounds - - -		
Average yield:						
4 feed grains	2,881	882	31	3,492	1,079	31
4 food grains	1,582	681	43	1,650	855	52
Total, 8 grains	2,438	744	31	2,792	925	33

1/ U.S. Dept. Agr., Stat. Rept. Serv., Crop Production, 1967 Annual Summary, Wash., D.C., Dec. 19, 1967, p. 39, unless otherwise noted.
2/ Derived from tables 7 and 9.
3/ Sorghum grain for U.S., pulses for USSR.
4/ Crop Production, 1968, Wash., D.C., Dec. 19, 1968, pp. 5, 36, unless otherwise noted.

n.a. = not available.

Table 9.--Production of major grains, United States and Soviet Union, average 1961-65, annual 1967

Item	Average 1961-65			1967		
	United States 1/	Soviet Union 2/	USSR as percentage of U.S.	United States 3/	Soviet Union 2/	USSR as percentage of U.S.
	Million bushels		Percent	Million bushels		Percent
eed grains:						
orn, grain	3,758	367	10	4,760	315	7
ats	953	365	38	789	661	84
arley	398	810	204	373	951	255
orghum grain and pulses 4/	548	248	45	756	216	29
ood grains:						
heat	1,214	1,844	152	1,522	2,352	154
ce	33	535	1,621	24	472	1,956
uckwheat	5/.9	32	3,556	n.a.	48	---
ye	151	17	11	189	39	20
	Million short tons			Million short tons		
4 feed grains	145	43	30	176	49	28
4 food grains	41	71	173	6/51	86	169
Total, 8 grains	186	114	61	6/227	135	59

1/ U.S. Dept. Agr., Stat. Rept. Serv., Crop Production, 1967 Annual Summary, Wash., C., Dec. 19, 1967, p. 41.
2/ USDA estimate.
3/ Crop Production, 1968 Annual Summary, Wash., D.C., Dec. 19, 1968, p. 38.
4/ Sorghum grain for U.S., pulses for USSR.
5/ 1961-64 only.
6/ Excludes buckwheat in the U.S.

n.a. = not available.

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Table 10.--Production of five major grains and total grain, Soviet Union, 1958-68

Year	Total grain 1/		5 major grains 2/	
	USDA estimate 3/	USSR official estimate 4/	USDA estimate 3/	USSR official estimate 4/
	Million metric tons			
1958	114.2	134.7	109.2	129.0
1959	94.2	119.5	90.6	115.3
1960	95.5	125.5	89.4	118.5
1961	109.4	130.8	102.2	122.5
1962	109.6	140.2	99.2	128.5
1963	90.0	107.5	80.3	96.5
1964	121.6	152.1	107.4	135.9
1965	100.4	121.1	91.0	110.4
1966	145.9	171.2	135.3	159.1
1967	124.9	147.9	114.3	135.9
1968	5/141.5	6/169.2	5/130.6	6/155.5

1/ Wheat, rye, barley, oats, corn for grain, millet, buckwheat, rice, pulses.
2/ Wheat, rye, barley, oats, corn for grain.
3/ Usable grain.
4/ Bunker weight; that is, as originally harvested, not dried or cleaned. USSR Central Stat. Directorate, Narodnoye khozyaystvo SSSR, 1967, g., Moscow, 1968, p. 370, unless otherwise noted.
5/ USDA estimate.
6/ Pravda, Jan. 26, 1969.

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THE NETHERLANDS' MIXED FEED INDUSTRY

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U.S. DEPARTMENT OF AGRICULTURE

ABSTRACT

Grain use in concentrated feeds in the Netherlands has declined because of increased use of lower cost substitutes. Manioc chips and meal and corn gluten are two major feed grain substitutes used in mixed feeds. High grain prices in the European Community have encouraged the use of grain substitutes. In addition, the Dutch mixed feed industry is highly developed, making extensive use of linear programing in formulating least-cost rations. Increased use of grain substitutes in other countries of the European Community is likely.

Key Words: Netherlands, mixed feed industry, grain substitutes.

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FOREWORD

One rather absorbing development in the feed manufacturing industry of the Netherlands has been the decline in the use of grains in mixed feeds despite industry expansion and rising livestock numbers. This report discusses in some detail the reasons for this development, the ingredients being substituted for grains, the structure of the Dutch mixed feed industry, and the implication for the future for the whole of the European Community.

Developments in the Community's livestock feed complex are of major importance to the United States. In 1968, for example, the United States exported to the Community $841 million of feed grains, corn byproducts for feed, oil cake and meal, and oilseeds. These commodities accounted for 62 percent of our nearly $1.4 billion agricultural exports to the Community.

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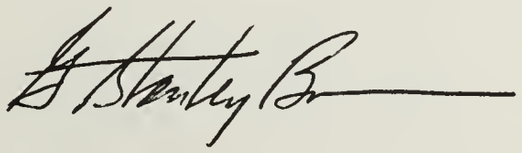

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SUMMARY

Grain use in concentrated feeds in the Netherlands declined from 4.1 million tons to 3.3 million tons between 1960/61 and 1967/68. This decline occurred despite steady increases in both concentrate feed consumption and livestock output. Compound feed production increased from 4.6 million tons to 6.6 million tons during the same period.

The shift from grain to nongrain components in concentrate rations has adversely affected U.S. grain and feed trade with the Netherlands. This is because our market share of the Netherlands' imports of "other feeds" is only about half as large as our share of Dutch feed grain imports.

Feeding of grain has been discouraged by changing price relationships which favor nongrain feed ingredients. Since 1962, variable levies of the Common Agricultural Policy (CAP) have increased import prices of grain substantially.

Levies and duties of a proportionate magnitude have not been applied to several products that compete with grain. For example, since 1962, levies or duties on corn gluten, beet pulp, and brewers waste have remained at zero. Levies or duties on manioc chips and meal have increased about $4.50 and $7.00 per ton, respectively, since 1962. On the other hand, the variable levy on corn and sorghum in the Netherlands has increased over $30 per ton.

Growth in the size of the mixed feed industry and advances in technical expertise have been important factors affecting the demand for various livestock feed ingredients in the Netherlands. When the European Community (EC) began to unify grain policies in 1962, the Netherlands' feed industry was already processing over 80 percent of all concentrated livestock feeds. As grain prices rose, the feed industry made greater use of linear programing in selecting the most economically priced ingredients. Feed mixers are now using a variety of grain substitutes and will continue to as long as their price makes their use economical.

In 1967/68, grain composed 45 percent of total concentrate feed rations in the Netherlands, compared with about 68 percent in 1960/61. Although all grain will not be replaced in livestock rations, it is estimated that continued grain price increases could lead to further substitution.

There are many potential threats to U.S. feeds in the Netherlands and other EC countries. These threats stem largely from unpredictable policy decisions by the Community in attempting to dispose of surplus agricultural products. Current programs aim at disposing of large quantities of domestically produced sugar and nonfat dry milk in feed. Surplus soft wheat poses the largest single threat to the U.S. share of the EC feed grain market. A decision by the EC to substantially increase use of surplus wheat in livestock rations--through target price adjustments or denaturing premiums--could further impair U.S. feed grain exports to the EC.

THE NETHERLANDS' MIXED FEED INDUSTRY--ITS IMPACT ON USE OF GRAIN FOR FEED

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INTRODUCTION

Cereals, oilseeds, and animal feeds are the three major agricultural commodity groups imported from the United States by the Netherlands. From 1965 through 1967, imports of these commodities from the United States averaged $274 million annually and accounted for about 75 percent of U.S. agricultural products imported by the Netherlands. Consequently, factors affecting the Netherlands' importation and use of these commodities are of major interest to the United States.

The feed economy of the Netherlands experienced significant change during the 1960's. In the beginning of the decade, grain began to be relatively less important as an ingredient in livestock rations. At the same time, use of some lesser known feeds and grain byproducts began increasing. This development is of interest to the United States not only because of this country's trade with the Netherlands, but also because of its possible implications for other U.S. markets.

Many factors interact to determine the amount and composition of feeds produced for and utilized by the livestock industry. It is estimated that over 95 percent of all concentrates consumed by livestock in the Netherlands are commercially mixed (84 percent in 1964/65). Thus, the feed mixing industry is important in determining the type of concentrated feeds used in the livestock industry. This paper analyzes some of the factors underlying the shift in use of concentrates and the development of the mixed feed industry in the Netherlands.

In this report, "mixed feeds" include both complete feeds (i.e., formulated rations) and high protein supplements which are added to grain. Feeds "custom mixed" by livestock producers are not considered as output of the mixed feed industry.

A glossary of selected terms used in this report appears on page 36.

LIVESTOCK INDUSTRY EXPANSION

The Netherlands has traditionally been a producer and exporter of livestock products. Livestock products accounted for 60 to 65 percent of the value of agricultural production during 1955-65; exports of livestock products accounted for 35 to 40 percent of Dutch agricultural exports during the same period. Livestock production is still being pursued vigorously by Dutch farmers despite higher feed and grain prices resulting from the EC's Common Agricultural Policy. Livestock and poultry numbers have expanded, leading to increased feed requirements (see fig. 1 for growth in animal units and app. table 1 for actual numbers). Production of livestock products in the Netherlands has increased because of efficient producers and increased consumer and export demand.

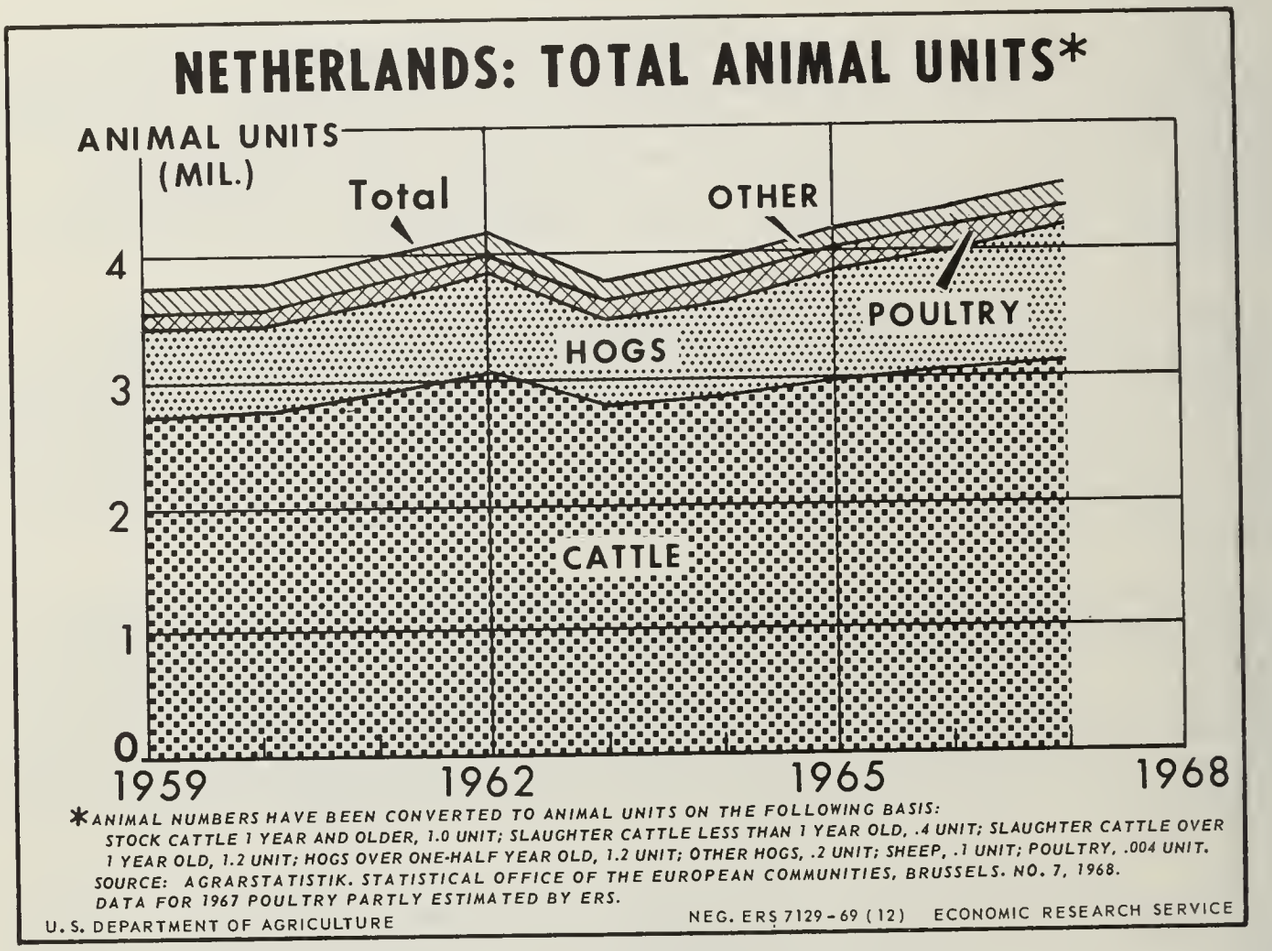

Figure 1

Despite expansion in the livestock and poultry sectors, the amount of grain used for feed in the Netherlands has declined nearly every year since 1960/61. Figure 2 shows that this decline in use of grain has occurred despite increases in consumption of concentrate feeds. Use of concentrates other than grain more than doubled between 1960/61 and 1967/68, while mixed feed production increased by half (see app. table 2 for quantitative data).

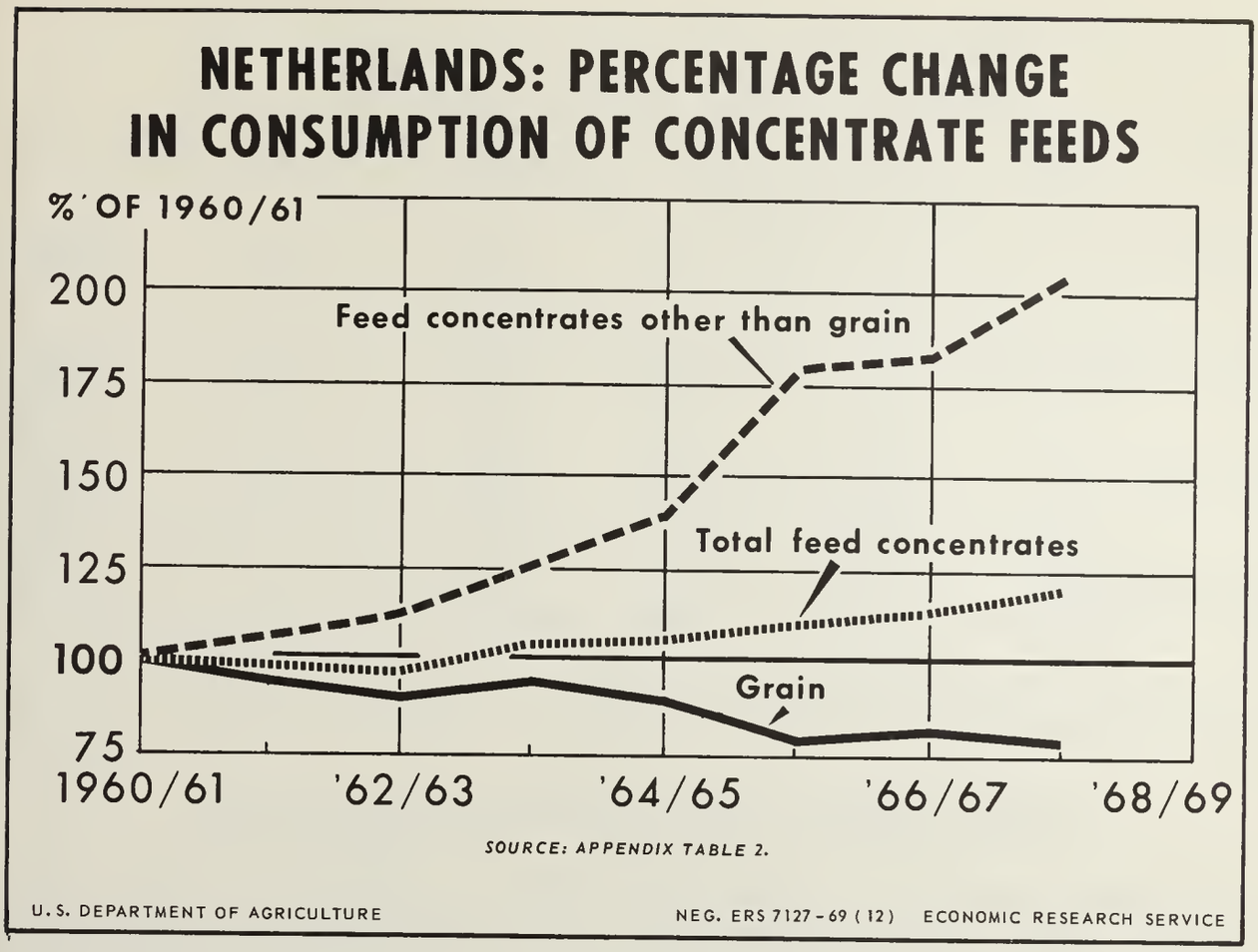

Figure 2

Because of the shift in demand for different types of feed ingredients, imports of feed grain (corn, sorghum, barley, oats) fell from 2.7 million tons to 2.3 million tons during 1960/61-1968/69 1/ (app. table 3). While the value of feed grain imports from the United States increased during the 1960/61-1967/68 period (table 1)--reflecting higher import prices--the import value of feed ingredients other than grains increased more than sixfold.

Dutch imports of U.S. feed grain increased from $56.7 million in 1957/58 to $126.9 million in 1967/68 (table 1). U.S. sales of other feed ingredients rose sharply from $.87 million to $62.5 million during the same period. But the shift from feed grains to other feed ingredients has reduced the potential market for the United States, since our share of the Dutch market is much lower for other feed ingredients than for feed grains (68 percent and 39 percent, respectively, in 1967/68).

1/ Unless otherwise indicated, tonnages in this report are metric.

Table 1.--Netherlands: Imports of U.S. feeds and U.S. share of total, 1957/58, 1961/62, and 1967/68

Item	Unit	1957/58	1961/62	1967/68
Feed grains 1/	Mil. dol.	56.7	100.3	126.9
U.S. share	Pct.	52	63.4	68.3
Other ingredients 2/	Mil. dol.	.87	9.8	62.5
U.S. share	Pct.	1.8	11.5	38.6
Total feeds	Mil. dol.	57.6	110.1	189.4
U.S. share	Pct.	36.5	45.1	54.5

1/ Includes rye.
2/ Primarily oilseeds and meals, gluten feeds, milling offals, and beet pulp.

Source: Foreign Agr. Serv., U.S. Dept. Agr.

GROWTH IN PRODUCTION AND CONSUMPTION OF MIXED FEEDS

Although the feed-mixing industry has been well-established for many years in the Netherlands, it has grown rapidly and many firms have been modernized in recent years. Output nearly doubled between 1955/56-1957/58 and 1967/68--from an average of 3.2 million tons to 6.4 million tons (table 2). 2/ Production of mixed feeds for cattle, pork, and poultry all increased, with the greatest percentage increase occurring in feeds for cattle. Annual production of mixed feed for hogs accounted for more than 40 percent of total output.

Production of feed concentrates is limited by land area and the Dutch farmers' recognition of better alternative uses for land. Over half the agricultural area is in permanent meadows and pastures. Domestic production of raw materials for concentrate feeds increased only 10 percent in nearly 30 years. As early as the midthirties, imports supplied about 50 percent of concentrate feeds. In 1965/66, the proportion was over 70 percent.

The mixed feed industry is basic to the Dutch livestock complex. In recent years, over 95 percent of all concentrate feeds have been premixed, compared with about 20 percent in the United States. The high percentage for the Netherlands can be explained in large part by the small portion of concentrate feeds produced domestically relative to feed requirements.

2/ Since trade has thus far been negligible, production and consumption of mixed feeds are assumed to be equal.

Table 2.--Netherlands: Production of mixed feed by class of livestock, average 1955/56-1957/58, annual 1959/60-1967/68

Year 1/	Total	Cattle	Hogs	Poultry	Other
	1,000 metric tons				
Average:					
1955/56-1957/58	3,208	710	1,290	1,075	100
1959/60	4,425	1,000	1,745	1,580	100
1960/61	4,600	1,000	1,755	1,745	100
1961/62	5,050	1,250	1,860	1,840	100
1962/63	4,900	1,300	1,760	1,740	100
1963/64	5,015	1,315	1,825	1,775	100
1964/65	5,477	1,428	2,268	1,733	48
1965/66	5,961	1,595	2,540	1,764	62
1966/67	6,161	1,636	2,648	1,788	89
1967/68	6,392	1,678	2,858	1,781	75

1/ Sept. to Aug. for 1955/56 to 1960/61 and July to June for 1961/62 to 1967/68.

Source: (14, p. 88) and Foreign Agr. Serv., U.S. Dept. Agr.

Note: Underscored figures in parenthesis refer to references listed on p. 33.

Mixed feeds for hogs and poultry are very popular in the Netherlands. In 1964/65, about 95 percent of all poultry and hog concentrates were premixed (table 3). Most mixed feeds for hogs and poultry are consumed as a complete ration. About 70 percent of the concentrates used in feeding cattle are in the form of mixed feeds.

Table 3.--Netherlands: Consumption of total feed concentrates, concentrates consumed as mixed feeds, and total grain used for feed, by class of livestock, 1964/65

Item	Unit	Total	Cattle	Pigs	Poultry	Other
Feed concentrates	1,000 M.T.	6,442	2,029	2,338	1,823	251
Concentrates consumed as mixed feeds	do.	5,425	1,425	2,200	1,725	75
As a percentage of total feed concentrates	Pct.	84	70	94	95	30
Grain used for feed	1,000 M.T.	3,704	637	1,530	1,341	196
As a percentage of total feed concentrates	Pct.	57	31	65	74	78

Sources: (14, p. 88) and (15, p. 261).

Dutch consumption rates of mixed feed per animal are quite high. Figure 3 provides a comparison of mixed feeds consumed per animal in the Netherlands and in the entire EC (including the Netherlands). In 1965, the amount of mixed feeds consumed per head of poultry in the Netherlands was double that of the EC average. For slaughter hogs, the amount was over 2.5 times as great and for milk cows, nearly 3.5 times as large.

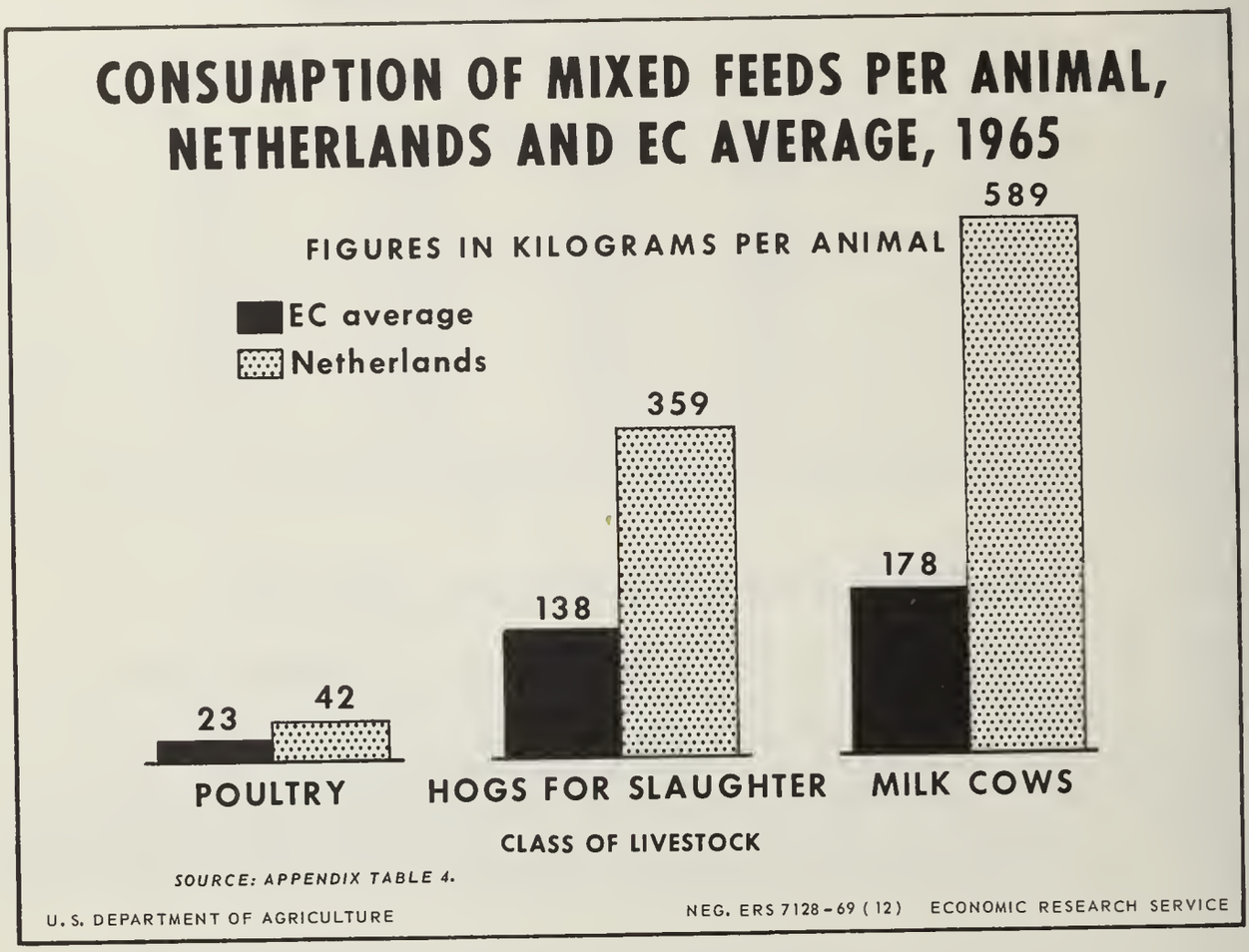

Figure 3

Although average EC consumption rates of mixed feeds are relatively low, consumption rates in Belgium and northern Germany are comparable to those in the Netherlands. Feed mixing in southern Germany is just beginning to develop. Further comparisons in the use of mixed feeds by EC member countries may be made by using appendix table 4.

FACTORS AFFECTING THE AMOUNT AND TYPE OF GRAIN USED IN FEED CONCENTRATES

The livestock sector of the economy is the primary user of grain in the Netherlands, accounting for about 70 percent of total grain consumed (production plus imports) in 1966/67. However, in absolute terms the amount of grain used for feed declined from 4.1 million tons in 1960/61 to 3.3 million in

1967/68 (app. table 2). The proportion of grain in concentrate feed declined from 68 percent at the beginning of this decade to 45 percent in 1967/68. It is important to note that expansion of the livestock industry helped keep the absolute level of grain utilization from falling further.

Corn is the only grain whose use as a feed has continued to increase in recent years, and thus has constituted an increasing proportion of grain used for feed. Because domestic production of corn for grain is practically nil, increased feeding of corn has been paralleled by increased imports of corn. Imports rose from 1.4 million tons in 1960/61 to 2.5 million in 1967/68. The U.S. share of this market has gradually increased--from 75 percent in 1960/61-1962/63 to 83 percent in 1965/66-1967/68.

Sorghum, barley, rye, and oats used for feed have declined in both absolute and relative importance in the Netherlands. This development is reflected in imports of each grain, all of which have declined substantially since 1960/61. Imports of these four grains from the United States have shown a corresponding decline.

Total utilization of wheat in the Netherlands declined from an annual average of 1.4 million tons in 1960/61-1962/63 to 1.1 million in 1965/66-1967/68, and this downward shift closely corresponds with the decline in wheat used for feed. During 1960/61-1962/63, 336,000 tons of wheat were used annually for feed, compared with 59,333 tons in 1965/66-1967/68. Wheat imports from non-EC suppliers are limited to hard varieties used for flour milling rather than for feed (app. tables 2 and 3).

Price Relationships Between Grains and Between Grain and Other Feed Ingredients

Grain is declining in importance as a feed in the Netherlands primarily because of its price relative to prices of other feed concentrates. In 1960/61, for example, corn, sorghum, and barley imports were subject to levies of $5.55, $8.33, and $19.44 per ton, respectively (table 4). EC establishment of grain target prices, intervention (support) prices, and threshold (minimum import) prices in July 1962 increased these levies substantially. Between July 1961 and August 1968, net import levies per ton of corn, sorghum, and barley increased $32.05, $30.47, and $5.76, respectively. But in many cases, levies or duties of similar magnitudes have not been applied to feed products that compete with grain.

Corn gluten feed, dehydrated alfalfa, beet pulp, soybeans, and soybean meal, for example, enter the EC duty- and levy-free from all suppliers, as was true before the EC grain marketing regulation (table 4). External tariffs on soybeans and soybean meal are bound at zero under the General Agreement on Tariffs and Trade (GATT).

While import charges are applied to manioc roots and meal, they are quite low relative to the levy on grain. In 1968/69, the combined levy and duty per ton of manioc meal was about one-fifth the levy on corn and sorghum. Manioc chips and meal are subject to an import duty that contains a fixed and a variable element. The variable element is calculated at 18 percent of the import

levy on barley. Although the fixed portion of the duty is $2.50 per ton, it has not been charged on imports of manioc roots or chips (table 4).

Table 4.--Netherlands: Levy or duty applicable for selected feed items, 1960/61 and 1968/69

Commodity	1960/61		1968/69	
	Duty per metric ton	Levy per metric ton	Duty per metric ton	Levy per metric ton
	Dollars	Dollars	Dollars	Dollars
Corn	0	1/5.55	0	2/37.60
Barley	0	1/19.44	0	2/25.20
Sorghum	0	1/8.33	0	2/38.80
Corn gluten	0	0	0	0
Beet pulp	0	0	0	0
Waste from brewing and roasting houses	0	0	0	0
Soybeans	0	0	0	0
Soybean meal	0	0	0	0
Manioc chips	0	0	3/	2/4.54
Manioc meal	0	0	2.50	2/4.54
Dehydrated alfalfa	0	0	0	0

1/ Levy applicable in July. To limit frequent changes of the import levies, import prices (including the levies) were allowed to fluctuate within price limits which were $4.17 per ton higher and lower than target prices. Thus, minimum import prices were established $4.17 per ton lower than target prices.
2/ Levies applicable Aug. 1.
3/ As yet a duty has not been applied to manioc chips.

EC import policies have not maintained a competitive relationship for imports of all feedstuffs. This situation reflects the major importance of grain production in the EC and the EC's attempt to improve farm incomes by maintaining high grain prices.

Corn is the primary feed grain imported from the United States by the Netherlands. This is because of the EC's self-sufficiency in wheat and barley and the relatively favorable threshold price of corn compared with other grains. The Netherlands' imports of corn from the United States increased from 951,000 tons in 1960/61 to 1.9 million tons in 1967/68.

Sorghum competes primarily with corn in the Netherlands' feed grain market. However, the threshold price established for sorghum is not in line with its relative feeding value when compared with corn's. This accounts for declining sorghum imports--from 696,000 tons in 1960/61 to 361,000 tons in 1967/68. When used as a cattle and swine feed, sorghum has a feeding value about 90 to 95 percent of corn's. Corn and sorghum are almost equal in feeding value for

poultry. 3/ The 1967/68 basic threshold price (July 1) of corn was $88.38. On the basis of the feeding value of sorghum for beef and swine, the 1967/68 price of sorghum--relative to the price of corn--should have ranged from between $79.54 and $83.96 per ton. However, in that year the threshold price for grain sorghum was set at $85.44. A similar price relationship persisted in 1968/69 (table 5).

Table 5.--European Community: Price relationships of principal feed grains and relative feeding values, 1968/69

Commodity	Threshold prices per metric ton: 1967/68	Threshold prices per metric ton: 1968/69	Calculated prices per metric ton (1968/69) 1/	Feed values 2/
	Dollars			
Corn	88.38	92.69	102.33	100.0
Barley	89.00	92.19	92.10	90.0
Wheat	104.38	104.38	104.38	102.0
Sorghum	85.44	89.00	94.66	3/92.5

1/ Calculated from relative feed values, based on a threshold price of $104.38/metric ton for wheat. Calculated prices estimate threshold prices that would equate feeding values.
2/ Estimated relative feed values.
3/ Average feed value of sorghum for hogs and cattle.

Sources: (2, p. 4) and (17, pp. 1073-1981).

Under 1968/69 price relationships in the Netherlands (and the EC), corn was favored for feed over barley and wheat. Corn and good quality wheat are considered by European experts to be approximately equal in feeding value, while the value of barley for feed is about 90 percent that of corn. 4/ Target prices for corn, barley, and wheat were $94.94, $94.44, and $106.25 per ton, respectively, for August 1, 1968 (most grain deficit area). Many European experts contend that the target price of corn should be closer to wheat's to reflect more accurately their feeding value. 5/ This would encourage feeding of EC surplus soft wheat. (For more detail on this matter, see p. 32).

3/ (17, pp. 455-456).
4/ Feed values for corn, sorghum, barley, and wheat vary with the quality of the grain and by type of livestock. In particular, the feed value of corn exceeds that of some European soft wheats by as much as 2 to 10 percent.
5/ It should be made clear, however, that corn/soft wheat market price relationships are more favorable to wheat than target prices indicate. The surplus of soft wheat has resulted in prices near intervention levels, while corn prices have remained close to target levels.

Table 5 (cols. 1 and 2) provides comparative information on grain threshold prices, showing the sharp increase in the threshold prices of corn and sorghum between 1967/68 and 1968/69. Based on U.S. estimates of feeding values of grain (table 5, col. 4)--which give a lower feed value rating to corn relative to wheat than given by European researchers--the threshold prices of corn and sorghum are still below their relative feeding values in 1968/69. This situation could lead to further adjustments in the threshold prices of these two grains--as indicated by the calculated prices--and provide even more incentive to the importation of other feed products which substitute for grain. 6/

Mixed Feed Prices Relative to Feed Grain Prices

Mixed feed prices have been an important influence on the amount of grain used in feed concentrates. Although retail prices of mixed feeds have risen steadily since 1959/60, the price of feed grain has risen at a faster rate. Consequently, use of mixed feeds--incorporating larger proportions of nongrain components--has been encouraged at the expense of direct use of grains. Relative to unmixed grain, mixed feeds have become better and better buys for Dutch farmers. Table 6 lists retail prices of selected mixed feeds from 1959/60 to 1966/67 and shows the percentage increase in price during this period. Prices of mixed rations for hogs and poultry increased 27-32 percent, while prices of mixed feeds fed to cattle and calves increased 15-19 percent. On the other hand, the minimum import price of corn, sorghum, and barley increased 49, 54, and 35 percent, respectively, during essentially the same period (table 7). It is also important to note that the mixed feed prices given are retail prices, while the threshold prices for grains do not include internal transportation, handling, or marketing costs. The minimum import prices of feed grain have increased more in line with aggregate agricultural cost factors, which rose 44 percent between 1959/60-1966/67, than have mixed feed costs.

Increased Use of Linear Programing in the Mixed Feed Industry

Changing price relationships among feed ingredients have precipitated increased use of grain byproducts and "exotic" feeds. However, several other factors--particularly the increased use of linear programing in determining the composition of the mix--have contributed substantially to these developments.

The Netherlands' mixed feed industry was already well-established before the EC increased variable levies on grain. In 1960/61, over two-thirds of all concentrate feeds produced were mixed feeds. However, substantial grain price changes in 1962 brought about a revaluation of feed formulation in the livestock industry. The mixed feed industry was technically advanced and it assumed the lead in expanding the use of computer technology in the mixed feed complex.

6/ Corn and barley prices were increased $1.00 per ton for the 1969/70 season; barley intervention prices were increased $.50 per ton.

Table 6.--Netherlands: Retail prices of selected mixed feeds, 1959/60-1966/67

Year	Price per 100 kilograms				
	Cattle cake, high protein	Calf meal, high protein	Pig meal, high protein	Farrowing meal, high protein	Laying meal, incomplete ration
	Dollars				
1959/60	9.42	9.37	8.25	8.49	9.10
1960/61	9.02	8.62	7.91	8.07	8.46
1961/62	9.91	9.42	8.97	9.17	9.53
1962/63	10.47	9.81	9.22	9.45	9.83
1963/64	10.50	9.83	9.33	9.53	10.06
1964/65	10.69	10.30	10.11	10.44	10.83
1965/66	10.94	10.66	10.55	10.99	11.41
1966/67	11.18	10.79	10.79	11.18	11.54
	Percent				
Percentage increase, 1959/60-1966/67	19	15	31	32	27

Source: (14, p. 118).

Table 7.--Netherlands: Threshold (or minimum) import prices for coarse grains and c.i.f. price of soybeans, 1959-67

Year	Prices per 100 kilograms, July			
	Corn	Sorghum	Barley	Soybeans (c.i.f.)
	Dollars			
1959	5.97	5.57	6.62	9.35
1960	5.97	5.31	6.77	6.50
1961	6.39	6.11	7.08	11.09
1962	7.08	6.88	7.78	10.21
1963	7.39	7.15	7.95	11.02
1964	7.61	7.38	8.13	11.10
1965	8.49	7.70	8.92	11.54
1966	8.73	8.45	8.91	12.49
1967	8.90	8.60	8.96	11.38
	Percent			
Percentage increase, 1959-67	49	54	35	22

Source: (14, p. 122) and (16, p. 725).

The computer, through linear programing, was introduced on a wide scale to evaluate feed ingredients in terms of their relative feeding value. In the simplest terms, linear programing is a tool enabling management to organize resources or enterprises to minimize costs of production or to maximize profits. In the case of feed formulation, the mixed feed industry has employed linear programing techniques to determine the least-cost combination of ingredients within given constraints; i.e., minimum protein content, maximum fiber content, maximum animal fat content, and so forth. Current market prices for raw materials are fed into a computer for analysis on a frequent basis (sometimes weekly). Computer printouts (see app. table 5 for a sample) provide current information to the feed mixer on the proportion of ingredients to be used at existing prices. This information enables the feed mixer to formulate a livestock ration that meets specified feed standards at a minimum cost.

Linear programing information is available to most mixed feed manufacturers in the Netherlands. However, few small feed mixers own and operate computers because of the high cost involved and the technical knowledge required. Cooperative feed mixers rely on Cebeco or C.I.V. for linear programing information (see pp. 29, 30 for information about Cebeco and C.I.V.). Even mixers who do not have access to computers gain knowledge of profitable changes in the composition of feeds. Most cooperatives, although not required to do so by law, attach the feed formula to each bag of mixed feed.

Widespread application of linear programing in the Netherlands has accentuated the long-term decline in grain used in concentrated feed. Appendix table 6 shows a comparison of a hog feed formulated early in the 1960's with a similar ration formulated in 1968. The nutritional value of both feeds is considered equal, but the 1968 formulation is only 34 percent grain while the earlier ration is 70 percent grain.

Linear programing has permitted feed mixers to explore the potential of nearly every available feed that is palatable or nutritious. When prices of the mixed feed ingredients change, the effect on demand is registered almost immediately in the feed industry. Consequently, the Dutch livestock feed industry, which continues to rely very heavily on imported feed concentrates, is very sensitive to price changes.

Growth of the Mixed Feed Industry

The shift in use of ingredients in mixed feeds has been affected by the growth of the industry. Concentrate rations prepared by industrial processors contain less grain than those rations prepared on farms. In 1965, 57 percent of all concentrates fed to livestock in the Netherlands were grain. However, only 42 percent of all concentrates used by the mixed feed industry were grain. Consequently, as the mixed feed industry expands its relative share of concentrate feeds that are fed by farmers, consumption of grain is affected.

The mixed feed industry makes possible the increased use of grain byproducts and many other nongrain feed ingredients. A substantial knowledge of prices, relative feeding values, and nutritional requirements, plus investment

in equipment for handling and mixing, are needed to purchase and use lower cost ingredients. These requirements exceed the capacities of individual farm operations.

FACTORS AFFECTING USE OF NONGRAIN FEED INGREDIENTS

The declining importance of grain as a feed in the Netherlands has brought about increased use of some nongrain feed ingredients. Included in the nongrain category are high protein meals, manioc, sugar, certain dairy products, molasses, and selected "other" commodities (such as animal and vegetable oils, feed peas, and potatoes). These commodities, which are replacing grain in livestock rations, are discussed below.

High Protein Feeds

Dutch farmers are now feeding more high protein feeds than ever before. However, the demand is being supplied only in part by traditional protein-rich feeds such as oilseed cake and meal, meat meal, and fish meal. Since 1960/61, use of other high protein feeds (such as milk powder, corn gluten, feed peas, and alfalfa and grass meals) has increased substantially.

Feeding of high protein cakes and meals--oilseed, animal, and fish--has not increased as a proportion of concentrates fed (app. table 2). In 1955/56, these ingredients accounted for 16 percent of the concentrates fed and remained near this proportion through 1967/68. The balance between use of animal protein (including fish) and oilseed cakes and meals is about the same as in 1955/56. In 1955/56, about four parts of vegetable oilseed cake and meal to one part of animal and fish meal was being used in concentrate feeds. This ratio narrowed to about three to one in 1960/61. Since 1960/61, however, oilseed cake and meal have gradually regained their earlier position relative to animal (and fish) protein.

Animal protein, in the form of meat meal, is a byproduct of livestock slaughterhouses. Its future world supply will be commensurate to further expansion in the livestock industry. Fish meal can be a byproduct of the fish processing industry, or "rough" fish catches may be processed into fish meal. Since Peru is the world's largest supplier of fish meal--accounting for 60 percent (by weight) of world exports in 1967 (app. table 7)--its export prospects are critical to the world supply. Peru exported 1.4 million tons of fish meal in 1964 and 1965, 1.3 million tons in 1966, and 1.6 million in 1967. A recent study by the Food and Agriculture Organization concluded that world anchovy numbers have been depleted appreciably and that a maximum catch was probably reached in 1967. Fishermen have experienced increasing difficulty in obtaining good catches in recent years (1).

Total consumption of vegetable oil cake and meal in the Netherlands increased 13 percent between 1962 and 1967 (table 8). Consumption of soybean cakes alone increased 65 percent during this period. Thus, soybean cake and meal have been increasing their share of the vegetable protein market, rising from 39 percent in 1962 to 56 percent in 1967. Consumption of other types of

vegetable oil cake and meal has varied substantially from year to year, with consumption of many types having gradually declined. Major exceptions are cake and meal produced from sunflower and colza (rape).

Table 8.--Netherlands: Apparent consumption of oil cakes and meals, 1962-67 1/

Type of oil cake or meal	1962	1963	1964	1965	1966	1967
	1,000 metric tons					
Linseed	186	173	211	166	151	96
Peanut	37	39	34	20	27	33
Soybean	296	269	332	378	403	489
Sesame	19	19	15	11	13	5
Cottonseed	64	76	67	64	63	46
Sunflower	94	92	62	70	123	117
Copra	29	12	50	27	38	49
Palm kernel	-4	11	4	-4	3	-3
Rape seed	29	33	25	34	49	26
Other	14	12	13	12	16	9
Total	764	736	813	778	886	867

1/ Imports plus production minus exports.

Sources: (13, p. 96) and (19, various annual reports).

Future U.S. exports of oilseeds and oil cake and meal to the Netherlands will depend considerably on the outcome of a recent proposal by the Commission of the European Community to levy a consumption tax on products of oilbearing materials of vegetable and marine origin that are used for food or feed. The proposal calls for a consumption tax of about $60 per ton for vegetable oils and $30 per ton for oil cake and meal (special arrangements would be made for reimbursing trade losses suffered by the Associated Overseas Territories of the EC). Certain animal fats may also be subject to a tax. The proposed taxes would be applied to both imports and indigenous production and are designed, according to the Community, to aid in solving surplus problems in the EC by curtailing milk production, encouraging consumption of butter relative to consumption of margarine, and promoting increased use of grain--particularly barley and soft wheat.

The United States exported over $525 million of vegetable oil, oilseeds and oil cake and meal to the EC in 1967. Soybeans and oil cake and meal enter the EC duty free (a GATT tariff binding is in effect), while vegetable oils are subject to a duty of 9-15 percent. The impact of consumption taxes on U.S. exports to the Netherlands will depend on the absolute level of the taxes and the level of taxes on oilseed cake and meal relative to that in effect for substitute products such as corn gluten, meat meal, and fish meal.

Corn Gluten Feed

Use of corn gluten as a feed ingredient has increased spectacularly in the Netherlands. Imports of corn gluten into the Netherlands rose from 49,000 tons in 1959/60 to 453,000 in 1967/68 (table 9). Since 1962/63, the United States has supplied about 80 percent of the Dutch import market. The sharp increase in use of corn gluten feed began in 1962/63 and is linked with the application of higher levies on grain under EC grain marketing regulations. Total availability of corn gluten feed in the Netherlands is shown in appendix table 2.

Table 9.--Netherlands: Imports of corn gluten feed and the U.S. share, 1959/60-1967/68

Year	Imports		Year	Imports	
	Total	From United States		Total	From United States
	1,000 metric tons			1,000 metric tons	
1959/60	49	28	1964/65	230	190
1960/61	41	11	1965/66	331	284
1961/62	48	16	1966/67	384	299
1962/63	82	62	1967/68	453	360
1963/64	184	138			

Source: Foreign Agr. Serv., U.S. Dept. Agr.

Corn gluten is a byproduct of the wet-milling process of starch manufacturing (other byproducts include germ, bran, and corn solubles). Corn gluten feed consists of corn gluten (processed into a meal) and corn bran, with or without corn solubles. Corn gluten feed contains at least 25 percent protein, while corn gluten meal is manufactured to contain either 41 or 60 percent protein. Although rich in protein, corn glutens are not considered to be good-quality proteins. 7/ They are fed primarily to dairy cattle.

The future of corn gluten as a livestock feed in the EC depends upon its price relationship to grain and other high-protein feeds. 8/ If applied to corn gluten, EC Commission proposals to tax protein meals could lower its level of use (current proposals do not specifically mention corn gluten). Unlike grain, corn gluten feed now enters the EC free of duties or levies. There presently is little basis to assume that the favorable prices for corn gluten compared with grain will be changed. Any price increases for grain would encourage greater use of corn gluten feed.

7/ (17, pp. 423-424).

8/ When fed to dairy cattle, corn gluten feed is worth approximately 115 percent (by weight) of the value of corn. In 1968, the average value of a ton of imported corn gluten feed was less than a ton of imported corn. As long as import prices reflect this difference, the use of corn gluten feed will probably continue to expand.

Manioc

Manioc has become increasingly important as an ingredient in mixed feed in the Netherlands and several other EC countries. A recent study by the International Trade Center, GATT, discusses the use of manioc in the Netherlands, West Germany, and Belgium (12). Much of the following discussion is based on this GATT report.

Manioc is a root of a plant widely grown in areas of Asia, Africa, and Latin America. It is exported in root forms--which include chips and pellets--or as flour and meal. Most feed mixers are using the root forms of manioc. Manioc is an energy feed and competes directly with barley, corn, and other grain. It is used mostly in mixed feeds for hogs.

The Netherlands, West Germany, and Belgium accounted for 97 percent of EC imports of manioc in 1967 (table 10). From $27 million in 1962, total EC imports increased to $51 million in 1967. Although feed mixers had long been aware of manioc's potential for use in feed, manioc was not used extensively until 1962. The introduction of variable levies on grain has encouraged use of manioc (see table 4 for a comparison of selected levies and duties) by the feed mixing industries of the Netherlands, West Germany, and Belgium, and these countries will probably import larger amounts in the future.

Table 10.--European Community: Imports of manioc and manioc products, 1962 and 1967

Country	1962		1967	
	1,000 dol.	1,000 M.T.	1,000 dol.	1,000 M.T.
West Germany	24,151	366.1	32,879	532.7
Netherlands	70	1.2	9,181	158.8
Belgium	1,517	23.0	7,109	113.3
France	1,730	23.4	1,548	20.4
Total EC	27,470	413.7	50,824	826.5

Source: (12).

The content of manioc in mixed feed now averages about 10 percent in West Germany and about 3 percent in the Netherlands. The GATT study concluded that since about half of the ingredients in mixed feeds are grain, manioc could be used more extensively in the EC.

Sugar

Sugar is being used in livestock feeds in the Netherlands and other EC countries (table 11). EC use of sugar in feed increased from nil in 1960/61 to an estimated 340,000 tons in 1968/69. Raw sugar has been imported for feed, and on a limited scale EC-produced surpluses are being denatured for feed (i.e., rendered unfit for human consumption).

Table 11.--European Community: Utilization of sugar for feed, 1960/61-1968/69

Country	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69 1/
	1,000 metric tons								
Netherlands	---	2	2	2	1	1	1	75	150
Belgium-Luxembourg	---	---	---	---	---	---	---	30	30
West Germany	1	2	47	4	62	220	281	250	100
France	---	40	8	6	9	59	66	1/70	60
Italy	---	---	---	---	---	---	---	---	---
EC	1	44	57	12	72	280	348	1/425	340

1/ Estimated.

Sources: (22), and Foreign Agr. Serv., U.S. Dept. Agr.

Sugar is a high energy food and is used in feeding rations for calves and chickens, but mostly for pigs. The level of sugar use in rations in the EC has generally been less than 10 percent. Sugar mixes well in feeds and requires no special mixing equipment. 9/ Its use as a livestock feed in the EC has been encouraged by a combination of surplus sugar production in the EC and low world prices for raw sugar.

During the fifties, sugar production in the EC plus supplies from French Overseas Departments approximated consumption in the Common Market. However, beginning in the early 1960's, production increased faster than consumption and the Common Market became a net exporter of sugar. Exportable surpluses produced in 1963 and 1964 were marketed at reasonable prices, but in 1965 world sugar prices fell sharply--from $126 per ton (5.72 cents per pound) in 1964 to $44.50 per ton (2.02 cents per pound) in 1965 (table 12). The EC began using substantial quantities of denatured sugar for feed in 1965. Since then, world sugar prices have remained low, and larger amounts of sugar have been used for feed in the EC.

The EC sugar regulation that became effective in July 1968 and favorable weather resulted in even larger surplus production in 1968/69. EC sugar production is supported at levels substantially above world prices. The EC intervention (support) price for 1968/69 was $212.30 per ton for white sugar. The average world price for raw sugar during the first two-thirds of 1968 was $39.20 per ton (table 12). Under the regulation, surplus sugar can be either denatured and used as livestock feed, or moved into world markets; in either case a substantial subsidy is required. A comparison of these two alternatives indicates that disposal of surplus EC sugar is expensive under either alternative but that denaturing sugar and using it for feed is probably less costly than exporting it when world sugar prices are depressed.

Alternative I.--Sugar prices in the EC were supported at $212.30 per ton (3rd-quality sugar) in 1968/69. To make sugar attractive as a feed in the EC, it was subsidized so that its market price was 90 percent of the market price of corn. Using the market price of $97.50 per ton for corn, a denaturing subsidy of about $140.30 per ton of sugar was paid on sugar used for feed. 10/

9/ This is true as long as the percentage does not exceed the 10-percent level.

10/ The $140.30 denaturing subsidy was calculated as follows:

Support price (3rd-quality sugar)	= $212.30	per metric ton
Quality allowance (due to quite limited supplies of 3rd-quality sugar)	2.50	per metric ton
Technical costs of denaturing	6.00	per metric ton
Transportation costs to feed mill	7.00	per metric ton
Total	$227.80	
Minus:		
Market price of corn ($97.50) times 90 percent = $87.75 but rounded by the EC to	$ 87.50	
Denaturing premium	$140.30	

Assuming that 1 ton of sugar replaced about 0.9 ton of imported corn, the import levy of approximately $34 per ton was forfeited. Under these circumstances, the net cost to the EC Agricultural Fund for use of domestically produced sugar as feed in the EC was approximately $174.30 per ton ($140.30 plus $34).

Table 12.--Raw sugar price, f.a.s. Cuba, 1962-68 1/

Year	Price per pound	Price per kilogram
	Cents	Cents
1962	2.80	6.17
1963	8.31	18.32
1964	5.72	12.61
1965	2.02	4.45
1966	1.76	3.88
1967	1.88	4.14
1968 2/	1.78	3.92

1/ Price calculated for implementation of International Sugar Agreement. Simple average of daily prices, London and No. 8 spot New York, both adjusted to f.a.s. (free alongside ship) Cuba.
2/ Jan.-Aug.

Alternative II.--Assuming white sugar sells for about 50 percent more than raw sugar, its value would be about $45 per ton when raw sugar sells for $30 per ton. The export subsidy required to move sugar into world markets, excluding transportation and marketing costs, would be $167.30 per ton ($212.30 minus $45).

A comparison of the $174.30 denaturing subsidy per ton and the $167.30 export subsidy suggests that there would be a saving of $7 per ton by exporting. However, since the export subsidy does not include transportation and marketing costs and since the denaturing subsidy includes a $7 cost per ton for transporting the sugar to the feed mills, the net cost of the denaturing subsidy would probably be less than that of the export subsidy. Also, Dutch experts maintain that 1 ton of sugar will substitute for 1.012 tons of corn. In this case, a denaturing subsidy of around $129-$130 per ton (rather than $140.30) would be sufficient to move sugar into feed use.

Disposal of surplus sugar production is costly to the EC Agricultural Fund as well as to sugar producers and beet growers. Consequently, production quotas for each EC country are likely to be adjusted to bring production and consumption more nearly in line. But surplus sugar production is likely to persist for some time, and present high price levels for grain--combined with depressed world prices for sugar--will continue to result in some surplus being used in feed in the EC.

Dairy Products

Milk production in the Netherlands and throughout the EC is increasing faster than consumption. The Community has established a target price for raw milk (at the farm) of $10.30 per 100 kilograms and has authorized government agencies to purchase butter and nonfat dry milk at support prices of $173.50 and $41.25 per 100 kilograms, respectively (1968/69 prices). 11/ Milk producers have responded to the high price incentives by producing large EC-held stocks of butter and nonfat dry milk.

Provisions of EC dairy regulations, supplemented by other measures, have proved inadequate for disposal of surplus dairy products. At the end of 1968, butter stocks were estimated at about 300,000 tons.

The EC has hinted that some butter stocks may be disposed of in feed. However, when the costs of alternative disposal programs are considered, it seems unlikely that large quantities of butter will be fed. Butter (82 percent butterfat) is a high-energy food, and each unit supplies about 1.8 times the energy of the same weight of corn. Subsidies to encourage use of butter in feed in the EC would have to be at least $156 per 100 kilograms 12/ for butter to effectively compete with corn. At the same time, subsidies on butter exports (82 percent butterfat) to the United Kingdom were $106.50 per 100 kilograms in July of 1968. Subsidies on butter exports to other third countries were higher.

Nonfat dry milk is being used for feed in the EC. It is generally used as a milk replacer for calves or used in poultry feeds and in feeds for small pigs. Since 1960, the amount of nonfat dry milk used for feed in the EC has increased from 80,000 tons to 715,000 in 1967 (table 13).

It seems likely that as milk production continues to increase in the EC, use of nonfat dry milk for feed will also increase. (This will be the case if 1969/70 price proposals for a direct aid of $38.25 per kilograms are approved by the EC Council.) The world market for nonfat dry milk is depressed. So far,

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11/ Commission price proposals for 1969/70 include substantially lower prices for butter ($111.00 per 100 kilograms) but sharply increased prices for nonfat dry milk ($71.25 per 100 kilograms). Direct aid to users of nonfat dry milk for feed would be increased from $8.25 to $38.25 per 100 kilograms, while aid to users of liquid skim milk for feed would be increased from $1.50 to $4.25 per 100 kilograms.

12/ This rough calculation disregards the protein and mineral value of corn and assumes the following: (a) Butter, which is 82 percent butterfat, would supply 1.8 times the energy of a similar unit of corn; (b) corn is valued at $9.27 per 100 kilograms, the 1968/69 threshold price. The denaturing subsidy for butter would need to be higher than $156 per 100 kilograms if the protein and mineral content of corn were considered.

Community subsidies for feed use have been less than export subsidies. Export subsidies in July 1968 for nonfat dry milk (less than 1.5 percent butterfat) were $20-$23 per 100 kilograms, while subsidies paid on nonfat dry milk for calf milk replacer averaged $8.25 per 100 kilograms. 13/ Until the world market for nonfat dry milk improves, the EC will probably continue to rely more on feeding than on exporting.

Table 13.--European Community: Production of feed concentrates containing nonfat dry milk powder and amounts of powder used, 1960-67

Year	Production	Amounts of nonfat dry milk powder used in feed
	1,000 metric tons	
1960	123	80
1961	216	140
1962	293	190
1963	380	247
1964	634	412
1965	745	484
1966	946	615
1967	1,100	715

Source: Monthly Bulletin of Agricultural Economics and Statistics. FAO, Rome, Sept. 1968, p. 17.

Other Commodities

Molasses.--Molasses from cane or beets is a satisfactory substitute for part of the corn in a ration and is most commonly used in rations for ruminants. However, molasses generally supplies less feed nutrients per unit of weight than does corn.

Use of molasses in feeds has risen consistently in the Netherlands, increasing fivefold between 1955/56 and 1967/68 (app. table 2). In 1955/56, molasses accounted for slightly over 1 percent of concentrates fed; it accounted for 3.6 percent in 1966/67. Molasses is particularly beneficial when used with poorer quality feeds since it makes them more palatable. Assuming that the price of molasses remains competitive, the increasing use of inferior-quality concentrate feed ingredients in the Netherlands should encourage continued use of molasses.

13/ A much higher subsidy--$27-$28 per 100 kilograms--is needed to move nonfat dry milk into pork or poultry rations. This subsidy would bring the price below world market levels.

Animal and vegetable oils (excluding dairy products).--Feed mixers in the Netherlands are using animal fats and vegetable oils in mixed feeds, particularly in pig and poultry rations. Fats and oils are being added to mixed feeds for additional energy; they supply approximately 2.25 times as much energy per pound as digestible carbohydrates do (17, p. 83). Fats and oils are being incorporated by feed mills rather than by farmer-feeders because these products require special processing equipment.

The level of fats and oils used in any ration is low--generally less than 2 percent. However, between 1962 and 1968, fats and oils used by the mixed feed industry in the Netherlands quadrupled (table 14). In 1962, fats and oils were about 0.5 percent of mixed feed production; the proportion had increased to about 1.8 percent by 1968.

Feed mixers are incorporating some unprocessed oilseeds in mixed feeds. Little is known about the level of use. Data in table 14 do not include oils from unprocessed oilseeds.

Table 14.--Netherlands: Fats and oils used in mixed feeds, 1962-68

Type of commodity	1962	1963	1964	1965	1966	1967	1968
	Metric tons						
Animal fats	15,920	20,320	29,160	32,740	35,720	54,480	100,590
Vegetable oils	9,070	12,310	18,790	18,340	19,030	18,950	17,780
Total	24,990	32,630	47,950	52,080	54,750	73,430	118,370

Source: Foreign Agr. Serv., U.S. Dept. Agr.

Feed peas.--Feed peas are becoming more important as a feedstuff in the Netherlands. Peas are an excellent feed in that they contain as much protein as corn gluten feed while supplying more total digestible nutrients (17, pp. 495-496).

The major restriction to the use of feed peas has been their generally high cost relative to that of other feeds. However, since 1964/65, larger quantities of feed peas have been imported by the Netherlands--mainly from the USSR (table 15). Future imports by the Netherlands will depend on the availability of feed peas on world markets and their price relative to prices of other protein sources. Supplies fluctuate substantially from one season to another.

Table 15.--Netherlands: Imports of feed peas and the USSR share, 1959/60-1967/68

Year	Imports		Year	Imports	
	Total	From USSR		Total	From USSR
	1,000 metric tons			1,000 metric tons	
1959/60	36	---	1964/65	122	94
1960/61	16	---	1965/66	375	343
1961/62	17	---	1966/67	136	61
1962/63	40	---	1967/68	108	29
1963/64	19	---			

Source: Foreign Agr. Serv., U.S. Dept. Agr.

Potatoes.--While potatoes are not used in mixed feeds, they are high in starch and substitute to some degree for grain, particularly for ruminants and in pork production. Yearly use of potatoes as feed by Dutch farmers depends on the level and quality of indigenous production. In recent years, potatoes used for feed have averaged about 16 percent of total potato production. Since several crops in the crop rotation scheme have become financially unprofitable for Dutch farmers, there has been a tendency in recent years for them to increase production of potatoes, with consequent higher availability of potatoes for feed (table 16) at relatively low prices. Since the Dutch ruminant and pig population has continued to climb, further gains in feed usage of potatoes can be expected up to 20-25 percent of domestic potato production.

Table 16.--Netherlands: Production of potatoes and use of potatoes for feed, 1950/51 and 1961/62-1967/68

Year	Production			Year	Production		
	Total	Potatoes for feed			Total	Potatoes for feed	
		Amount	Percentage of total production			Amount	Percentage of total production
	1,000 M.T.	1,000 M.T.	Percent		1,000 M.T.	1,000 M.T.	Percent
1950/51	4,173	1,356	31	1964/65	4,110	649	16
1961/62	3,270	572	15	1965/66	3,230	375	12
1962/63	3,953	517	13	1966/67	4,124	716	17
1963/64	3,854	710	18	1967/68	4,840	903	19

Source: (14).

STRUCTURE AND SELECTED CHARACTERISTICS OF THE MIXED FEED INDUSTRY

Production by Size of Firm

The Dutch feed industry had its beginning in small mills that received farmers' grain and custom milled it. The industry has grown to become highly technical and complex. The large feed manufacturers are now importers and merchandisers as well as processors.

Today's feed mixing industry is characterized by a few large firms and hundreds of small operators. It is estimated that there were over 1,149 firms in 1967/68, but one-fifth of the firms produced four-fifths of the industry output (6.4 million tons). In 1967/68, 216 large firms averaged 24,250 tons of output annually, compared with an average of about 1,200 tons for the 933 smaller firms (table 17).

The large number of small firms indicates a potential for further acceleration of structural change. Since 1961, the number of units with 10 or more employees has declined 12 percent, but output has increased 34 percent (table 18). CEBECO, a large wholesale cooperative, has recommended to its member co-ops that new plants have an annual production capacity of about 50,000 tons (assuming a one-shift operation). 14/ Plants now of this size employ about 50 persons.

Private Versus Cooperative Mixed Feed Enterprises

Output of mixed feed is about equally divided between private (51 percent) and cooperative firms (49 percent). Among the 1,149 firms listed in 1967/68, private companies produced 3.3 million tons of feed and cooperatives, 3.1 million tons (table 19). Slightly over 900 firms, or nearly 80 percent of the 1,149, were private. Most small-capacity firms in the Netherlands are in the private sector. In 1967/68, 854 privately owned firms produced a maximum of 10,000 tons of mixed feed, compared with 189 cooperative enterprises. In 1966/67, the figures were 961 and 213, respectively (20).

Labor Productivity

Technological innovations in the mixed feed industry have led to higher labor productivity despite industry structural problems. A labor census in September of each year gives an indication of productivity trends based on comparisons of output. The level of output per employee has increased rather steadily during the last 6 years, assuming no changes in the seasonality of employment. Most improvement occurred among firms with 50 or more employees; output of these firms increased from 357 to 511 tons per person, an increase of 43 percent (table 20). Output of firms with 10 to 49 employees increased from 392 to 428 tons per worker, a 9-percent rise. Although data are not available for plants with less than 10 employees, it is likely that their labor productivity increases have been small because such plants are less able to adopt technological innovations.

14/ For more information on CEBECO, see p. 30.

Table 17.--Netherlands: Production of mixed feed by capacity per firm, 1964/65-1967/68

Year	All firms		Firms with an annual capacity of --											
			Less than 500 M.T.		500-1,000 M.T.		1,000-5,000 M.T.		5,000-10,000 M.T.		10,000-50,000 M.T.		50,000-over 100,000 M.T.	
	Firms	Output	Firms	Output	Firms	Output	Firms	Output	Firms	Output	Firms	Output	Firms	Output
	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.
1964/65	1,339	5,477	436	95	233	169	480	1,085	102	704	72	1,316	16	2,108
1965/66	1,349	5,960	425	100	236	171	n.a.	n.a.	103	715	79	1,866	n.a.	n.a.
1966/67	1,271	6,161	383	86	220	165	469	1,085	102	715	79	1,531	18	2,580
1967/68	1,149	6,392	329	74	183	135	421	944	110	751	89	1,765	17	2,721

1/ Excludes specialty feeds like mineral and vitamin mixtures and calf milk feeds.

Source: Netherland's Product Board for Feed.

Table 18.--Netherlands: Production of mixed feed by number of persons employed per firm, 1961-66

Year	All firms		Firms employing 9 or less people		Firms employing 10 or more people					
					Total		10-49		50 or more	
	Firms	Output	Firms	Output	Firms	Output	Firms	Output	Firms	Output
	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.	No.	1,000 M.T.
1961	n.a.	4,825	n.a.	1,285	286	3,540	243	1,294	43	2,246
1962	n.a.	4,975	n.a.	1,006	285	3,969	241	1,475	44	2,494
1963	n.a.	4,955	n.a.	1,010	281	3,945	239	1,464	42	2,481
1964	n.a.	5,246	n.a.	1,115	271	4,131	234	1,487	37	2,644
1965	n.a.	5,719	n.a.	1,387	260	4,332	223	1,553	37	2,779
1966	1/1,852	6,028	1/1,600	1,273	252	4,755	214	1,609	38	3,146

1/ Estimated.

Sources: (4, various issues).

Table 19.--Netherlands: Output of mixed feed by size and class of firm, 1967/68 1/

Firm's yearly output (in 1,000 metric tons)	Total		Private companies		Cooperative enterprises	
	Firms	Output	Firms	Output	Firms	Output
	Number	Metric tons	Number	Metric tons	Number	Metric tons
Less than 3	842	810,502	740	663,466	102	147,036
3-10	201	1,094,937	114	605,483	87	489,454
10-50	89	1,764,728	39	733,140	50	1,031,588
50-100	8	570,654	4	293,403	4	277,251
Over 100	9	2,150,698	6	994,958	3	1,155,740
Total	1,149	6,391,519	903	3,290,450	246	3,101,069
		Percent		Percent		Percent
Share of total		100		51		49

1/ Excludes 500-600 very small firms.

Source: Foreign Agr. Serv., U.S. Dept. Agr.

Table 20.--Netherlands: Labor productivity in the mixed feed industry, 1961-66

Year	Firms with --					
	10-49 persons		50 or more persons		10 or more persons	
	Total personnel 1/	Output per person	Total personnel 1/	Output per person	Total personnel 1/	Output per person
	Number	Metric tons	Number	Metric tons	Number	Metric tons
1961	3,299	392	6,038	357	9,337	379
1962	3,633	460	6,196	403	9,829	424
1963	3,755	390	5,735	433	9,490	416
1964	3,875	384	5,865	451	9,743	424
1965	3,955	393	5,845	475	9,800	442
1966	3,759	428	6,133	511	9,892	479

1/ As of September.

Source: (4, various issues).

Competition

The number of Dutch mixed feed firms is large, and products and prices are very competitive. The market for a firm can be country-wide, and the number of firms in each geographic area is usually adequate to assure competition.

However, the number of firms probably will decline. The portion of industry output supplied by the smaller firms seems a certain target for large plants hoping to improve utilization of plant capacity as well as for new plants for investors.

Factors encouraging a reduction in the number of small units are:

(1) Economies of scale: Although no report on economies of scale is available for the Netherlands, a report prepared on the U.S. feed manufacturing industry concludes that such economies do exist (23, p. 31). For example, the study found savings ranging from $1.79 to $2.56 per short ton (depending on the form in which the feed was manufactured) when the plant size increased from 80 to 300 tons of feed produced per day.

(2) Economies and advantages of market promotion: The longest and widest points of the Netherlands are 196 miles and 125 miles, respectively. Large centrally located producers are able to extend marketing activities to most areas of the country. Small regional producers cannot match extensive promotional activities of large competitor firms.

(3) Credit and other services: Larger feed companies are better able to extend credit and technical advisory services and are equipped for bulk deliveries of feed. Small plants are usually not competitive in these areas.

Marketing of Mixed Feeds

Mixed feeds are sold in bulk, paper sacks, and burlap bags. Burlap bags are the most popular container. In 1967/68, 46 percent of all sales were in burlap bags and 33 percent were in paper sacks. Thus, bulk feeds represented 21 percent of that year's sales (table 21). In recent years, there has been a strong trend in favor of bulk feeds at the expense of feed in burlap bags. Development of bulk facilities at the mill and the farm is inevitable. Lower costs and the convenience of bulk feeds will encourage their increased use.

Industry Organizations 15/

Most cooperatives in the Netherlands are represented by one of the two national associations listed below. Both are large wholesale buyers and sellers for their members.

(1) CIV (Cooperatieve Centrale Landbouw In-en Verkoopvereniging G.A.) is a Catholic organization that represents mixed feed producers in southern Nether-

15/ (13, pp. 97-99).

Table 21.--Netherlands: Percentage of sales of mixed feeds in bulk, paper sacks, and burlap bags, 1967/68

Item	Total	Cattle feeds 1/	Pig feeds 2/	Poultry feeds 3/
	Percent			
Bulk	21	7	21	37
Paper sacks	33	55	24	24
Burlap bags	46	38	55	39

1/ Excludes milk replacer feeds but includes mixed feed for sheep and horses.
2/ Includes milk feeds.
3/ Includes mixed grain.

Source: (14).

lands and has about 500 members.

(2) CEBECO (Nationale Cooperatieve Aan-en Verkoopvereniging G.A.) is a Protestant organization that represents feed mixers in northern Netherlands and has about 350 members.

Fifteen large private compounders are represented by the trade organization Vereniging van Nederlandse Mengvoederfabrikanten. Approximately 1,100 small manufacturers are associated with Algemene Nederlandse Molenaarsbond. In addition, a semigovernmental agency, Produktschap Voor Veevoeder, promotes trade in animal feedstuffs.

Regulatory Control

Government regulations on mixed feeds are very limited in the Netherlands. In general, they concern imported protein, fishmeal manufactured in the Netherlands, mineral mixtures, mixtures containing antibiotic additives, and hormone and medicinal preparations. Most control over feed manufacturing is of a voluntary nature. A private organization, Stichting C.L.O.-Controle, establishes standards for simple and mixed feeds. Manufacturers complying with these standards receive C.L.O. approval, which is considered essential for farmer acceptance.

IMPLICATIONS FOR THE FUTURE

Although the preceding analysis is confined largely to feed concentrates used in the Netherlands, its basic implications extend considerably to the entire EC. This is because agricultural policies and price relationships effective in the Netherlands are part of an overall common agricultural policy applying to all member countries of the EC. The Netherlands is simply in the vanguard of developments outlined in the preceding sections of this report.

Future Position of the Netherlands

The widespread use of computers in feed formulation and the relatively heavy dependence of the Netherlands on imported feedstuffs are likely to keep the Netherlands more responsive to the possibilities of substituting feed components than most other EC countries. Nevertheless, Belgium and German feed mixers, for example, are using large amounts of grain substitutes in livestock rations. However, in West Germany, the amount of grain consumed by livestock continues to increase because of the large quantities of grain produced domestically and the lower degree of market penetration by the mixed feed industry. Mixed feed manufacturing and use in France and Italy are expanding, but the relative proportions of mixed feed in total feed concentrates used is much lower there than in Belgium or the Netherlands. Consequently, there is much latitude for expansion in mixed feed production in the three largest EC countries--France, West Germany, and Italy--and a potential for sharply increased use of nongrain components in concentrated feeds.

Shifts in Common Agricultural Policy

The European Community's Common Agricultural Policy, which will continue to be an important factor in determining the utilization of feed components, may be on the threshold of some basic changes. The CAP supports farm incomes through a system of high guaranteed producer prices. These prices, which are sometimes 100-300 percent above world levels, have stimulated agricultural output in the Community more than was first anticipated. Large surpluses of butter, sugar, and soft wheat have now been accumulated by storage agencies at prices substantially above these commodities' export value. Increased production, the extension of the CAP to more commodities, and the absorption of total intervention and disposal costs have caused the cost of the CAP to increase from $37.8 million in 1962 to $1.7 billion in 1967/68. Some EC officials predict that without policy changes the cost will increase to $10 billion in 1980. EC policy makers recognize the untenable nature of present policies and have proposed a number of short- and long-term measures to lessen the EC's agricultural problems. These proposals, if adopted, will have a significant impact on the feed sector of the EC.

Tax on Protein Meals and Vegetable Oils

One provision of the "Mansholt Plan" 16/ calls for a consumption tax on vegetable oils, oil cake and meal, fish oil and meal, and some animal fats. The proposed tax would be $60 per ton for most fats and oils and $30 per ton for oil cake and meal and fishmeal. The objective of this tax is to help alleviate surplus of dairy products, primarily butter. One specific aim is to reduce dairy farmers' use of high-protein meals, which some EC officials claim are responsible for the large increases in milk yields and output. Officials hope that the proposed tax would induce farmers to substitute grain for oil cake in dairy rations as well as in swine and poultry rations.

The United States is vitally concerned with the Community's proposed consumption tax on protein meals, vegetable oils, and other plant and animal proteins. U.S. exports of oilseeds and products to the Netherlands were valued at $489 million in 1968. The effect of a consumption tax on imports of oils and protein meal would depend on the magnitude of the tax. However, a tax of almost any level would probably be detrimental to the United States.

Price Relationships for Wheat, Feed Grain, and Other Concentrate Feeds

A continuation of EC grain prices at current or higher levels will further encourage substitution of nongrain feedstuffs (corn gluten, manioc, feed peas, and others) for grain in livestock rations. 17/ This will have a depressing effect on feed use of grain and on feed grain imports. However, the EC is deficient in animal feeds, and the EC market for them will expand if livestock output increases.

Another important factor affecting future feed grain requirements of the Community is the wheat/feed grain price ratio.

The EC exported an average of 3.7 million tons of wheat yearly during 1964-67 even though it was only about 80 percent self-sufficient in grain. A larger proportion of future EC wheat production may be diverted to feed use, and exports may thus decline. Wheat is an excellent feed and can be used as the only grain in poultry and swine rations, although mixtures are recommended. Good results have been achieved when beef cattle were fed concentrate rations that were one-half wheat. Approximately one-fifth of the wheat produced in the EC is used for feed.

Policy makers are already adopting policies encouraging further use of wheat for feed. Two policy adjustments that the EC is beginning to make are:

16/ The "Mansholt Plan" was submitted to the EC Council by the EC Commission in Dec. 1968. Included is a program for structural reform in the Community and a variety of short-run proposals, one of which is the consumption tax on oil and meal.

17/ Assumes that import taxes or levies on nongrain feedstuffs will not increase relative to grain prices.

(1) Equating prices for wheat, barley, and corn to relative feeding values.

(2) Increasing denaturing subsidies to bring more surplus wheat into feed use.

Adjusting prices of barley, wheat, and corn to reflect relative feeding values would eliminate the present distinction between the food and the feed markets for wheat. Soft wheat not purchased for milling would automatically move into the EC feed grain market without subsidy. This would require a lowering of the wheat price and/or a raising of feed grain prices. The latter is more likely. A decision by the EC to use its wheat internally would reduce U.S. feed grain exports to the EC below the level which would otherwise be attained. Except for 1.035 million tons of wheat which the EC is to donate under the Food Aid Convention of the International Grains Arrangement, most of its soft wheat could probably be consumed internally.

Exports of surplus wheat can be encouraged by provision of higher subsidies, or domestic feed use can be encouraged by provision of higher denaturing subsidies. The EC Commission has increased the denaturing premium for wheat several times. The denaturing premium for the 1969/70 season ranges from 50.5 to 53 cents per bushel early in the season to 57.3 cents per bushel in May-July 1970, when the wheat is denatured with dye or fish oil. Comparable denaturing premiums for the direct use of wheat in mixed feed are 47.7-50.3 cents per bushel to 54.6 cents per bushel. These subsidies have pushed feed wheat prices below corn prices.

Expanded Market for Nongrain Feed Ingredients

The Dutch market for nongrain feed items has expanded as a direct result of the CAP established for grain in 1962. A continuation of high grain prices and an expanding livestock economy will lead to even further increases in the use of nongrain feed items. Market prospects are bright for high-energy and/or high-protein feeds with zero or low import charges. Assuming no substantial change in EC import policies, use of manioc, corn gluten feed, feed peas, oilseed meals, dried pulp, brewers grains, animal and fish meals, and grass and alfalfa meals will increase.

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SELECTED TERMS

CIF price: A price that includes cost of the goods, insurance charges for the shipment, and freight charges to a named destination.

Common Agricultural Policy: The EC's system of farm policies that are essentially uniform throughout the area with respect to production and marketing within the EC and to trade with outside countries (the recent devaluation of the French franc has lessened the uniformity). The common market for agricultural products has been established for over 85 percent of EC production.

Concentrates: Feeds that are low in fiber and high in total digestible nutrients. They may be either low or high in protein.

Denaturing: A process whereby a food item is made unsuitable for human consumption but is left usable for livestock feed. Provision of a denaturing premium (subsidy) makes the item attractive as a feed in the lower priced market.

European Agricultural Guidance and Guarantee Fund (EAGGF): The fund established by the EC for financing its Common Agricultural Policy. The EAGGF is composed of a Guarantee Section and a Guidance Section. The former finances the common organization of markets by paying subsidies on exports to third countries and making intervention purchases in domestic markets. The Guidance Section provides funds to improve the agricultural structures of member states.

European Community: Variously referred to as European Economic Community, Common Market, Community, and so forth. It represents the economic integration of Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands. Although there are still officially three communities within the EC--the European Coal and Steel Community (ECSC), the European Economic Community (EEC), and the European Atomic Energy Community (EURATOM)--a treaty to replace the three separate treaties creating the three communities is due to be negotiated. The area will eventually have common policies with respect to agriculture, transport, taxes, and foreign trade.

General Agreement on Tariffs and Trade: A multilateral agreement, of which the United States is a signatory, to increase international trade by reducing tariffs and other barriers.

Intervention agencies: Organizations authorized by the EC to purchase commodities, which are eligible for support, at intervention price levels.

Intervention price: A price analogous to the U.S. "support price." It is the level--applicable to certain commodities of the EC's CAP--at which the EC makes purchases to provide price protection to EC farmers.

Kilogram: A unit equaling 2.2046 pounds.

Note: Most definitions were taken from Terms Used in International Agricultural Trade, U.S. Dept. Agr., FAS-M-152, revised. Apr. 1967.

Metric ton: A unit equaling 1,000 kilograms or 2,204.6 pounds.

Mixed feed: Feed that includes both complete feeds and high-protein supplements which are added to grain. Feed "custom mixed" by livestock producers is not considered as output by the mixed feed industry.

Target price: The price level that the EC seeks to attain at wholesale for commodities covered by the CAP.

Threshold price: A minimum import price established by the EC at a level that will not prejudice the sale of EC commodities covered by the CAP at or near the target price.

Variable levy: A levy on products imported by the EC that usually equals the difference between the higher EC threshold or gate price and the price of products offered by non-EC countries at the EC frontier.

APPENDIX

Appendix table 1.--Netherlands: Animal numbers, 1959-67

Year	Cattle	Hogs	Sheep	Chickens
	1,000 head 1/			
1959	3,163	2,938	294	30,555
1960	3,228	2,934	263	32,995
1961	3,387	3,187	284	37,187
1962	3,521	3,156	267	37,978
1963	3,226	3,022	260	39,190
1964	3,317	3,525	286	39,196
1965	3,465	3,987	316	41,363
1966	3,556	4,079	370	43,800
1967	3,639	4,540	340	n.a.

1/ December census.

Source: Agricultural Statistics, Statistical Office of the European Economic Community. No. 7. Brussels, 1968.

Appendix table 2.--Netherlands: Consumption of feed concentrates, 1955/56 and 1960/61-1967/68

Item	1955/56	1960/61	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68 1/
	1,000 metric tons							
Grain	2,762	4,096	3,664	3,886	3,704	3,287	3,356	3,250
Grain products	331	414	430	487	466	576	663	784
Pulses	32	48	35	32	151	374	185	155
Oil cake	517	682	757	721	783	880	892	914
Animal protein	126	209	220	228	226	211	219	239
Skim milk powder	8	60	101	141	150	145	135	153
Dried pulp	80	176	150	167	220	225	304	382
Grass, clover, and alfalfa	42	110	150	204	163	210	237	266
Molasses	50	100	120	150	160	200	250	250
Corn gluten feed	---	65	114	220	274	392	444	520
Manioc products	---	---	1	1	42	109	106	191
Minerals and other	61	101	115	129	103	131	139	194
Total	4,009	6,061	5,857	6,366	6,442	6,740	6,930	7,298
	Percent							
Grain as percentage of total	69	68	63	61	57	49	48	45
Mixed feed as percentage of total concentrates fed	72	76	84	79	85	88	89	n.a.

1/ Includes preliminary data and estimates.

Sources: (14, p. 87), (22, p. 20), and Foreign Agr. Serv., U.S. Dept. Agr.

Appendix table 3.--Netherlands: Grain supply and utilization, 1955/56 and 1960/61-1968/69

Item	1955/56	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69
	1,000 metric tons									
Corn:										
Total utilization	551	1,511	1,484	1,436	1,857	1,796	1,845	2,223	2,591	1,967
For feed	476	1,389	1,349	1,301	1,704	1,627	1,664	2,023	2,013	1,385
Total imports	623	1,428	1,520	1,692	1,899	1,694	2,001	2,203	2,485	1,832
From U.S	305	951	1,154	1,384	1,567	1,473	1,779	1,852	1,948	1,290
Sorghum:										
Total utilization	270	692	651	647	689	601	593	449	432	208
For feed	n.a.	n.a.	n.a.	810	676	683	685	454	371	165
Total imports	270	696	663	689	703	631	607	456	361	164
From U.S	257	621	521	613	568	596	596	318	243	56
Wheat:										
Total utilization	1,205	1,468	1,617	1,232	1,198	1,143	1,089	1,121	1,815	2,076
For feed	66	358	479	170	118	96	47	81	51	288
Total imports	806	718	1,021	501	763	689	722	595	881	1,284
From U.S	481	243	592	234	512	240	368	400	290	286
Barley:										
Total utilization	837	553	468	505	440	433	448	450	620	609
For feed	761	457	371	408	335	321	324	320	334	350
Total imports	683	321	334	259	230	214	294	184	160	209
From U.S	591	194	152	175	108	60	85	25	4	---
Rye:										
Total utilization	554	533	463	539	488	495	362	250	283	277
For feed	436	451	384	460	418	425	286	178	166	150
Total imports	128	101	174	243	190	143	129	63	43	36
From U.S	93	42	47	122	104	19	16	39	31	17
Oats:										
Total utilization	810	778	730	756	635	547	468	347	448	394
For feed	763	741	695	720	604	519	441	324	287	265
Total imports	232	280	221	222	118	134	141	68	81	73
From U.S	188	214	32	119	42	33	102	41	15	11
Domestic production	1,779	1,882	1,762	2,005	1,807	2,015	1,779	1,626	1,859	1,653
Grain imports 1/	2,742	3,544	3,933	3,606	3,903	3,505	3,894	3,569	4,011	3,598
Grain imports from U.S. 1/	1,915	2,265	2,498	2,647	2,901	2,421	2,946	2,675	2,531	1,660
Total domestic utilization	4,230	5,554	5,396	5,082	5,336	5,141	4,802	4,865	4,886	4,230
Total for feed	2,762	4,096	3,902	3,664	3,886	3,704	3,340	3,391	3,250	2,650
Grain consumed on the farm	761	658	493	497	382	338	234	180	n.a.	n.a.

1/ Excludes miscellaneous grains.

Source: (22), and Foreign Agr. Serv., U.S. Dept. Agr.

Appendix table 4.--European Community: Consumption of mixed feed per animal, 1963-65

Item	West Germany	Netherlands	Belgium	France	Italy	Luxembourg	EC average
	Kilograms						
Cattle:							
1963	324	1,297	759	151	116	(135)	298
1964	364	1,363	815	178	128	(97)	331
1965	421	1,354	888	200	165	307	369
Milk cows:							
1963	194	542	520	53	55	(112)	148
1964	220	570	529	60	63	(97)	161
1965	259	589	618	68	48	290	178
Hogs for breeding:							
1963	82	582	454	107	65	116	145
1964	84	595	464	129	69	(76)	158
1965	105	551	501	153	92	179	181
Hogs for slaughter:							
1963	59	349	259	97	96	86	116
1964	63	405	303	120	86	(57)	129
1965	73	359	310	126	113	136	138
Poultry:							
1963	30	44	42	15	6	(6)	20
1964	32	46	49	16	7	(4)	21
1965	34	42	(62)	17	9	29	23

Source: (12, p. 7).

Appendix table 5.--Netherlands: Sample computer printout of five alternative complete laying rations 1/

Item	Price per 100 kg.	Rations 1	2	3	4	5
	Dollars	Kilograms				
Corn	9.46	65.0	65.0	65.0	57.6	65.0
Sorghum	9.32	3.0	0.5	2.3	---	5.2
Manioc	7.72	---	---	---	5.0	---
Rice feed meal	8.00	---	---	---	10.0	---
Wheat millings	7.86	7.6	6.4	5.8	---	4.4
Corn gluten feed	8.13	2.5	---	0.9	4.2	0.7
Corn gluten meal	9.87	---	10.0	---	---	---
Sunflower meal	8.34	5.0	5.0	5.0	5.0	5.0
Peanut feed	10.50	3.6	0.7	4.2	3.9	4.6
Fish meal	13.93	3.0	2.5	3.5	3.0	3.3
Animal meal	11.37	5.0	3.1	5.0	5.0	5.0
Alfalfa meal	6.26	2.5	4.0	2.5	3.5	2.5
Molasses	3.75	---	---	3.0	---	---
Minerals	6.19	2.5	2.5	2.5	2.5	---
Minerals	5.28	---	---	---	---	4.0
Vitamins	19.33	0.3	0.3	0.3	0.3	0.3
	Unit	Rations 1	2	3	4	5
Calculated analysis:						
Energy	Calories/kg.	2,900	2,900	2,900	2,900	2,900
Protein	Pct.	17	17	17	17	17
Calcium	do.	1.21	1.10	1.24	1.23	1.77
Phosphorus	do.	0.78	0.70	0.77	0.81	0.85
Lysine	do.	0.70	0.61	0.71	0.71	0.71
Methionine	do.	0.33	0.37	0.33	0.33	0.33
Methionine plus cystine	do.	0.62	0.69	0.61	0.60	0.61
Tryptofan	do.	0.18	0.18	0.18	0.18	0.18
Arginine	do.	1.05	0.90	1.07	1.09	1.07
Cost per 100 kg	dol.	9.39	9.34	9.28	9.22	9.39

1/ Sixteen different ingredients have been theoretically combined to indicate the approximate cost of raw materials and the various portions of each required. The calculated analysis indicates that all rations are very similar. This ration was formulated in mid-1968.

Appendix table 6.--Netherlands: Comparison of similar nutritive value mixed feed rations for pigs, 1968 and early 1960's 1/

Ingredient	1968	Ingredient	Early 1960's
	Kilograms		Kilograms
Corn	24.0	Corn	25.0
Sugar	4.0	Rye	25.0
Barley	10.0	Sorghum	9.75
Tapioca root	5.0	Barley	10.0
Wheat millings	11.5	Soybean meal	4.0
Peas	18.5	Whale meal	4.5
Grass meal	4.5	Grass, clover, and alfalfa meal	5.0
Corn glutenfeed	11.0	Corn gluten meal	10.0
Animal fat	1.0	Minerals	1.5
Animal meal	1.0	Vitamins	.25
Vitamins	0.5	Molasses	5.0
Minerals	2.0		
Molasses	5.0	Total	100.0
Total	100.0		
	Percent		Percent
Grain as percentage of total	34	Grain as percentage of total	70

1/ The quality of the feed in terms of digestible protein, net energy, fiber content, and so forth is considered to be about equal.

Appendix table 7.--Fishmeal exports of principal fishmeal-producing countries, 1964-67

Country	1964	1965	1966	1967
	1,000 metric tons			
Chile	148.0	70.5	185.9	111.2
Angola	54.4	48.0	53.6	42.0
Iceland	127.5	149.2	172.3	132.5
Norway	182.8	259.8	266.4	486.8
Peru	1,426.1	1,412.8	1,304.5	1,560.9
South and Southwest Africa	254.7	232.8	165.6	286.0
Total of major exporters	2,193.5	2,173.1	2,148.3	2,619.5

Source: (1, p. 6).

* U. S. GOVERNMENT PRINTING OFFICE : 1970 O - 394-185 (31)

Appendix table 8.--Netherlands: Total nutrients utilized by livestock, expressed in starch-values, 1960/61-1966/67

Year	Total	Feed concentrates 1/	Roughage
	Million starch units		
1960/61	9,579	3,928	5,651
1961/62	9,485	4,322	5,163
1962/63	9,183	4,046	5,137
1963/64	9,397	4,361	5,036
1964/65	9,559	4,438	5,121
1965/66	9,681	4,710	4,971
1966/67	10,022	4,874	5,148

1/ Includes calf milk feed.

Source: Netherland's Product Board for Feed.

UNITED STATES DEPARTMENT OF AGRICULTURE
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AGRICULTURAL PROSPECTS IN CHILE

By Francis S. Urban

S-FOREIGN 288 FOREIGN REGIONAL ANALYSIS DIVISION JANUARY 1970

This report is a brief review of Chile: Demand and Supply Projections for Agricultural Products, 1965-1980, a market development study conducted by the Economic Research Center of the Catholic University of Chile, under contract with the U.S. Department of Agriculture. 1/ The study is one of a series initiated by the USDA and designed to evaluate the long-run potential supply and demand for agricultural products throughout the world. Data used as a basis for projections are from Chilean sources and may vary from USDA estimates. Hence, this review of study results does not necessarily imply concurrence by the U.S. Department of Agriculture.

- - -

Chile occupies a narrow strip of land along the western slopes of the Andes, 2,650 miles long and 250 miles wide at its broadest point. It covers an area of 286,400 square miles, excluding the Antarctic. Its climate varies from the subtropical to the very cold, and the rainfall is unevenly distributed from the totally dry Atacama desert in the north to the rain forests of Aisén in the south. The agricultural land of the country is limited by the topography to about 20 percent of its area, the rest being deserts, mountains, or areas too cold for agricultural use. Crops are concentrated in the Central Valley, which lies between the Andes and the coastal range, from the Aconcagua River valley, a little north of Santiago, to the city of Puerto Montt. North of the Aconcagua River are deserts, where only a few scattered oases and river valleys are suitable for agricultural cultivation. The area south of Puerto Montt is suitable mainly for the livestock industry and forestry. Chile's long seacoast, rich in marine life, has served to develop an important fishing industry, and sizable forest reserves of the south are being tapped for development of the paper industry. A variety of high-grade mineral resources, such as copper, iron, nitrates, coal, and petroleum, form the base of her international trade and industrial development.

1/ The complete study may be obtained on request from the Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250

The 1969 population of Chile is estimated at about 9.5 million. It is relatively homogeneous, with per capita education and income levels that are high relative to other Latin American countries. About 70 percent of the people live in urban areas. This proportion is still increasing. The Chilean economy has achieved a reasonably respectable rate of economic growth despite institutional limitations and continued high inflation. The agricultural sector, however, has been stagnant. Chile's principal exports consist of copper and copper products, iron ore, nitrates, molybdenum, iodine, paper and cellulose, fish flour, fish and shellfish, wool, wood, and fruits. Its principal imports are industrial equipment and machinery, motor vehicles and spare parts, iron, steel and other raw materials, chemical products, wheat, breeding cattle, cotton, sugar, coffee, tea, and edible oils. The United States is Chile's single most important trading partner. In 1965, the United States accounted for 30 percent of Chile's total exports and 39 percent of her total imports.

STUDY HIGHLIGHTS

Relatively high rates of population growth, an increase in per capita income, and the continued shift of people from rural to urban areas will continue to increase the demand for agricultural products. However, the improvement in agricultural production may not be sufficient to compensate for rising demand, and the gap between agricultural exports and imports is expected to increase in the projected years.

If the population of Chile increases at the projected rate of 2.6 percent a year and present agricultural policies are not significantly changed, continued large imports of wheat may be expected, and increasing imports of potatoes, edible oils, sugar, beef, milk and milk products, animal fats, and hides and skins will be necessary. Deficits may also appear in mutton and lamb, corn, dry peas, and chickpeas. On the other hand, fruit exports may improve significantly. Surpluses may also appear in rice, dry beans, pork, poultry meat, and eggs.

These projections are based on a study of the Chilean economy from 1940 to 1968 and, in particular, on analyses of agricultural supply and demand, capital, land and labor availability, agricultural policies, gross domestic product (GDP), population growth, and trade. Chile's population is expected to grow from 8.8 million in 1965 to about 10.0 million in 1970, and to 12.9 million in 1980. However, more recent statistics seem to indicate that the rate of 2.6 percent annual population growth, adopted for projections, may be excessive, and that it may have dropped to about 2 percent. Real GDP is projected to increase 4.7 percent per year, and per capita GDP, 2.1 percent per year, or from $529 in 1965 to $726 in 1980, in 1965 prices. Chile's foreign trade is heavily dependent on exports of mining products, which account for over 80 percent of the total value of exports. In this total, copper is the single most important commodity (48 percent of total exports in 1965). Hence, the international price of copper will largely influence Chile's future trade balance. If the price remains high, the positive trade balance on goods account will increase from $28 to $93 million between 1965 and 1980. If, on the other hand, low prices predominate, by 1980 Chile may have a negative balance of $120 million. Chile's deficit in agricultural commodity trade is expected to increase from $90 million in 1965 to nearly $200 million in 1980 (table 1).

Table 1.--Chile: Projections of principal macroeconomic variables, 1965-80

Variables	Unit	1965	1970	1975	1980	Annual rate of growth 1965-80
						Percent
Population.	Thousands	8,786	9,969	11,349	12,912	2.6
Per capita gross domestic product	Dollars 1/	529	601	663	726	2.1
Total gross domestic product.	Mil. $ 1/	4,646	5,989	7,523	9,372	4.7
Total exports: 2/						
High projections 3/ . .	" "	677	990	1,278	1,497	5.4
Low projections 4/. . .	" "	677	841	1,084	1,284	4.4
Total imports 2/.	" "	649	855	1,098	1,404	5.3
Trade balance: 2/						
High projections. . . .	" "	28	135	180	93	-
Low projections	" "	28	-14	-14	-120	-
Exports of agricultural products 5/	" "	19	50	68	75	9.6
Imports of agricultural products 5/	" "	109	134	192	274	6.3

1/ In 1965 dollars at the average exchange rate for the year. 2/ Goods only. 3/ Assume copper prices of 37.5¢ U.S. per pound. 4/ Assume copper prices of 30.0¢ U.S. per pound. 5/ Excludes forestry and fishery products. - Does not apply.

Sources: Tables 3, 5, 2.24, 2.29, and 5.39, Chile: Demand and Supply Projections for Agricultural Products, 1965-1980.

Projected Demand

Projections of direct demand for most of the products included in the study are based on the results obtained from the Family Budget Survey conducted by the study group during 1963-64. In the demand projections, direct demand was made a function of income, family size, and population. This assumed that the demand pattern in the basic consumption unit, a household, depends on family income and size. Seed, industrial demand, and waste were estimated from technical coefficients and added to direct demand. Prices were assumed to remain constant (tables 2 and 3).

Per capita demand for most agricultural commodities is expected to increase, with the fastest increase being registered in the consumption of fruits, meats, and some vegetables--indicating that the quality of diet will continue to improve. Since the standard of living in Chile is relatively high for Latin America, these changes will not seriously affect the overall pattern of demand, except to raise the proportion of fruits in the diet and to partially displace beef with poultry meat and pork.

Table 2.--Chile: Demand and supply balance for agricultural products, 1965-80

Commodity	Total demand 1/				Production 2/				Balance 3/			
	1965	1970	1975	1980	1965	1970	1975	1980	1965	1970	1975	1980
	1,000 metric tons											
Grains:												
Wheat	1,471.6	1,734.1	2,069.3	2,448.1	1,086.2	1,549.9	1,865.7	2,244.4	-385.4	-184.2	-203.6	-203.7
Rice (milled)	68.4	82.2	98.9	118.9	53.4	102.4	120.6	126.6	-15.0	20.2	21.7	7.7
Rye	8.6	9.5	10.7	12.0	8.6	9.6	10.8	12.2	--	.1	.1	.2
Corn	253.8	317.2	389.8	421.0	253.8	317.6	390.3	416.0	--	.4	.5	-5.0
Barley (malt)	67.6	94.7	102.0	114.0	67.6	94.7	102.0	114.0	--	--	--	--
Oats	88.2	120.5	155.0	164.5	88.2	120.5	155.0	164.5	--	--	--	--
Pulses:												
Dry beans	56.2	65.4	76.2	90.0	55.4	78.7	90.8	105.0	-.8	13.3	14.1	15.0
Dry peas	5.4	6.5	7.9	9.7	5.4	5.8	6.2	6.7	--	-.7	-1.7	-3.0
Lentils	4.8	5.5	6.3	7.0	9.1	9.7	10.3	10.8	4.3	4.2	4.0	3.8
Chickpeas	5.0	5.9	7.2	8.7	5.0	5.4	5.7	6.0	--	-.5	-1.5	-2.7
Tubers and vegetables:												
Potatoes	712.8	832.2	981.7	1,162.6	705.8	786.9	877.3	978.1	-7.0	-45.3	-104.4	-184.5
Tomatoes	103.3	127.9	159.1	199.8	n.a.	n.a.	n.a.	n.a.	--	--	--	--
Onions	87.7	106.4	130.4	160.2	122.2	133.9	149.3	166.0	34.5	27.5	18.9	5.8
Garlic	5.0	5.9	7.1	8.9	6.5	6.5	7.0	9.5	1.5	.6	-.1	.6
Fruits:												
Apples	99.8	123.5	166.0	207.6	121.4	140.5	190.4	268.3	14.4	17.0	24.4	60.6
Pears	21.6	27.0	39.3	55.8	24.2	29.7	49.6	72.0	2.6	2.7	10.3	16.2
Peaches	63.3	73.3	108.2	145.2	70.6	88.6	144.6	204.3	7.3	9.0	36.4	59.1
Oranges	48.6	59.2	75.3	94.8	48.6	49.4	74.2	94.2	--	-9.8	-1.1	-.6
Lemons	23.9	30.0	38.6	49.4	26.7	36.4	45.8	58.1	2.8	6.4	7.2	8.7
Plums	4.9	6.4	8.1	10.9	14.7	17.2	19.7	24.1	9.8	10.8	11.4	13.2
Table grapes	50.1	61.0	76.8	97.5	57.9	72.4	98.0	124.7	7.8	11.4	21.2	27.2
Wine grapes	671.1	790.3	899.8	1,024.2	686.2	770.2	930.1	1,012.9	15.1	-20.1	30.3	-11.3
Avocados	11.5	14.4	19.4	26.0	11.5	15.6	22.4	29.9	--	1.2	3.0	3.9
Nuts in shell	.7	.9	1.3	1.7	2.2	2.5	4.9	7.0	1.5	1.6	3.6	5.3
Edible oils 4/	62.8	77.1	94.8	105.5	44.5	56.5	67.3	71.1	-18.3	-20.6	-27.5	-34.4
Sugar (refined)	294.2	356.7	435.6	532.3	102.0	120.6	133.8	140.6	-192.2	-236.1	-301.8	-391.7

See footnotes at end of table.

- Continued

Table 2.--Chile: Demand and supply balance for agricultural products, 1965-80 - Continued

Commodity	Total demand 1/				Production 2/				Balance 3/			
	1965	1970	1975	1980	1965	1970	1975	1980	1965	1970	1975	1980
	1,000 metric tons											
Meats and eggs:												
Beef	166.0	204.5	253.9	315.4	121.7	130.3	138.3	147.1	-44.3	-74.2	-115.6	-168.3
Pork and pork products	43.9	56.6	72.9	93.6	48.9	69.0	88.5	102.2	5.0	12.4	15.6	8.6
Mutton and lamb	42.0	53.6	68.4	87.3	44.1	50.5	55.6	59.1	1.9	-3.1	-12.8	-28.2
Poultry meat	27.3	49.8	56.7	64.6	24.3	55.8	68.1	83.1	-3.0	6.0	11.4	18.5
Eggs	50.7	63.4	78.8	98.1	50.7	76.6	93.4	114.0	--	13.2	14.8	15.9
Milk & milk products 5/	1,191.4	1,473.9	1,821.8	2,288.9	810.2	892.6	983.2	1,083.1	-381.2	-581.3	-828.6	-1,205.8
Other animal products:												
Lard	7.9	9.6	11.8	14.4	2.5	3.3	4.1	4.7	-5.4	-6.3	-7.7	-9.7
Tallow	11.2	12.6	13.2	14.1	11.2	12.6	13.2	14.1	--	--	--	--
Wool	22.8	25.9	29.5	33.6	25.4	27.9	30.1	31.8	2.6	2.0	.6	-1.8
Cattle hides & skins	24.6	26.9	30.6	34.9	14.3	15.3	16.3	17.3	-10.3	-11.6	-14.3	-17.6

1/ Total demand includes direct industrial and seed demand and waste. 2/ Production of crops was projected for the main agricultural area only, situated between the provinces of Aconagua and Llanquihue inclusive. 3/ Minus (-) indicates potential imports and plus (+) potential exports. 4/ Production of sunflower seed and rapeseed oil only. 5/ Fresh milk and milk products expressed in fresh milk equivalent.

Source: Table 4, Chile: Demand and Supply Projections for Agricultural Products, 1965-1980.

Table 3.--Chile: Demand elasticities and projections of per capita demand, 1965-80

Commodity	Demand elasticities				Per capita demand			
	Income		Family size		1965	1970	1975	1980
	Workers	Others	Workers	Others				
					- - -Kilograms- - -			
Grains:								
Wheat 1/	-	-	-	-	156.2	162.3	170.9	178.5
Bread 2/	0.2	0.1	0.5	0.5	-	-	-	-
Spaghetti	.2	.1	.4	.3	-	-	-	-
Flour	.7	.2	.2	.1	-	-	-	-
Rice (milled)	.4	.2	.4	.3	7.4	7.8	8.2	8.8
Rye	n.a.	n.a.	n.a.	n.a.	.8	.8	.8	.8
Corn	n.a.	n.a.	n.a.	n.a.	1.8	1.8	1.8	1.8
Oats	n.a.	n.a.	n.a.	n.a.	7.4	7.9	8.5	9.0
Pulses:								
Dry beans	.2	.1	.6	.5	5.6	5.8	6.0	6.3
Dry peas	.6	.5	.2	.1	.5	.5	.6	.7
Lentils	.3	.2	.7	.6	.3	.3	.3	.4
Chickpeas	.3	.3	.1	.1	.5	.5	.6	.6
Tubers & vegetables:								
Potatoes	.5	.3	.4	.3	59.5	63.0	67.2	71.9
Tomatoes	1.2	.5	.5	.5	11.8	12.8	14.0	15.4
Onions	.7	.2	-.1	.3	8.6	9.3	10.2	11.1
Garlic	.5	.3	.2	-.3	.5	.5	.6	.6
Fruits:								
Apples	.5	.9	0	-.3	8.1	9.2	11.5	13.2
Pears					1.9	2.2	2.7	3.4
Peaches	1.6	1.1	-.2	.1	4.5	5.1	5.9	6.9
Oranges	.1	.6	.7	-.1	5.0	5.5	6.1	6.8
Lemons	1.0	.6	.3	0	2.7	3.0	3.4	3.8
Plums	n.a.	n.a.	n.a.	n.a.	.4	.5	.6	.7
Table grapes	.9	.5	-.8	.3	4.9	5.4	5.9	6.6
Wine grapes	n.a.	n.a.	n.a.	n.a.	79.3	79.3	79.3	79.3
Avocados	1.1	.6	.7	-.1	1.3	1.5	1.7	2.0
Edible oils	.6	.4	-.1	.1	6.0	6.5	7.1	7.0
Sugar (refined)	.5	.4	.3	.2	32.5	34.8	37.4	40.3
Meat and eggs:								
Beef	.6	.6	0	.1	19.0	20.5	22.4	24.4
Pork & pork products	1.1	1.1	.3	-.3	5.0	5.7	6.4	7.2
Mutton and lamb	1.3	.8	.1	0	4.8	5.4	6.0	6.8
Poultry meat	1.6	1.2	-.7	-.5	3.1	5.0	5.0	5.0
Eggs	.6	.6	0	.1	5.2	5.7	6.2	6.8

See footnotes at end of table.

- Continued

Table 3.--Chile: Demand elasticities and projections of per capita demand, 1965-80 - Continued

Commodity	Demand elasticities				Per capita demand			
	Income		Family size		1965	1970	1975	1980
	Workers	Others	Workers	Others				
					- - -Kilograms- - -			
Milk & milk products 3/	-	-	-	-	129.8	142.2	155.1	172.0
Fresh milk.	.6	.7	.2	.1	-	-	-	-
Condensed milk. . . .	1.0	1.0	-.1	.4	-	-	-	-
Powdered milk	1.2	.7	.1	.1	-	-	-	-
Butter.	.8	.6	.1	.1	-	-	-	-
Cheese.	.9	.7	0	.4	-	-	-	-
Other animal products:								
Lard.	.9	.5	.6	.5	.8	1.0	1.0	1.1
Wool.	n.a.	n.a.	n.a.	n.a.	2.6	2.6	2.6	2.6
Hides & skins (cattle)	n.a.	n.a.	n.a.	n.a.	2.7	2.7	2.7	2.7

1/ Per capita demand for wheat flour and flour products expressed in whole wheat equivalent. 2/ Demand elasticities refer also to rye bread. 3/ Per capita demand for milk and milk products expressed in fresh milk equivalent.
n.a. Not available. - Does not apply.

Sources: Tables 4 and 3.2, Chile: Demand and Supply Projections for Agricultural Products, 1965-1980.

Projected Supply

Supply projections for crops are based on an analysis of total available land, cultivated land, area under each crop, and yields. The projections of animal products take into account trends in inventory numbers, slaughter rate, and yields, except for milk and poultry products where data were available for production only. Projected trends were adjusted in the light of government investment programs. The possible impact on production of the current land reform was also taken into account. Although government price policy was discussed, input and product prices were assumed to remain constant. A scarcity of capital and government policies are considered to be the principal limiting elements in the increase of farm production, since land and labor supply are considered adequate (tables 2, 4, and 5).

The greatest increases in production are expected to occur in poultry products--8.6 percent per year for poultry meat and 5.5 percent for eggs--as a result of recent improvements in poultry breeding and management. Supplies of pork and lard will also increase substantially, at about 5.4 and 4.3 percent per year, due to the increase in productive efficiency of the pork industry.

Table 4.--Chile: Projected area under principal crops and yields, 1965-80 1/

Commodity	Area				Annual rate of growth 1965-1980	Yields				Annual rate of growth 1965-1980
	1965	1970	1975	1980		1965	1970	1975	1980	
	1,000 hectares				Percent	Kilograms per hectare				Percent
Wheat	696.3	738.3	780.2	822.1	1.1	1,560	1,950	2,250	2,596	3.4
Rice	27.6	29.5	31.5	33.6	1.3	2,978	3,750	4,400	4,400	2.6
Rye	7.1	7.6	8.0	8.5	1.2	1,190	1,263	1,350	1,435	1.2
Corn	83.1	87.3	91.6	96.0	1.0	3,054	2/ 3,200 3/ 2,500	2/ 3,900 3/ 3,000	2/ 4,000 3/ 3,100	1.8 0.1
Barley	31.9	34.9	35.8	40.8	1.7	2,119	2,256	2,402	2,402	.8
Oats	67.2	72.1	76.9	81.8	1.3	1,316	1,602	1,950	1,950	2.6
Dry beans	55.8	60.5	65.3	70.0	1.5	993	1,300	1,390	1,500	2.8
Dry peas	7.1	7.8	8.4	9.1	1.7	740	740	740	740	0
Lentils	23.5	25.0	26.5	28.0	1.2	387	387	387	387	0
Chickpeas	8.4	8.9	9.4	9.9	1.1	610	610	610	610	0
Potatoes	76.7	80.8	84.8	88.9	1.0	7,740	8,206	8,703	9,237	1.1
Onions	4.7	4.9	5.2	5.5	1.0	26,000	27,326	28,720	30,185	1.0
Garlic	1.3	1.3	1.4	1.9	2.6	5,000	5,000	5,000	5,000	0
Rapeseed	57.5	58.4	59.4	60.5	0.3	1,250	1,600	1,850	1,900	2.8
Sunflowerseed	31.8	33.8	35.7	37.6	1.1	1,410	1,600	1,850	1,900	2.0
Sugarbeets 4/	17.8	18.4	18.9	19.6	0.7	37,940	43,420	46,880	47,500	1.5
Total	1,197.8	1,269.6	1,339.2	1,413.6	1.1	-	-	-	-	-

1/ Area and yields projected for the main agricultural area only, situated between the provinces of Aconcagua and Llanquihue inclusive. 2/ Projections based on trend for the region between the provinces of Aconcagua and Talca. 3/ Projections based on experimental station estimates for the region between provinces of Maule and Llanquihue. 4/ Yields expressed in sugar weight. - Does not apply.

Sources: Tables 4.5 and 4.10, Chile: Demand and Supply Projections for Agricultural Products, 1965-1980.

Table 5.--Chile: Projected livestock numbers and yields, 1965-80

Livestock	1965	1970	1975	1980	Annual rate of growth 1965-80
					Percent
Beef cattle:					
Number of cattle (1,000 head)	2,870.2	3,076.4	3,256.3	3,472.7	1.3
Number slaughtered (1,000 head)	520.0	556.8	591.2	628.6	1.3
Yield (kilograms meat per animal slaughtered)	234.0	234.0	234.0	234.0	0
Hogs:					
Number of hogs (1,000 head)	1,090.2	1,134.5	1,192.3	1,253.1	1.0
Number slaughtered (1,000 head)	815.0	1,103.2	1,361.7	1,572.0	4.5
Yield (kilograms meat per animal slaughtered)	60.0	62.5	65.0	65.0	0.5
Sheep (meat variety):					
Number of sheep (1,000 head)	3,639.6	3,930.7	4,245.2	4,584.8	1.6
Number slaughtered (1,000 head)	2,474.8	2,774.1	3,006.6	3,193.8	1.7
Yield (kilograms meat per animal slaughtered)	17.8	17.8	17.8	17.8	0
Sheep (all varieties)	6,690.3	7,169.8	7,539.1	7,878.7	1.1
Yield (kilograms wool per head)	3.8	3.9	4.0	4.0	0.3

Sources: Tables 4.13, 4.14, 4.15, 4.16, 4.18, 5.27, 5.28, 5.29, 5.36, 5.37, Chile: Demand and Supply Projections for Agricultural Products, 1965-1980.

The supply of fruits and nuts is also estimated to increase rapidly, at the annual rate of 5 to 7 percent, reflecting the rates inherent in the government agricultural development plan and the productive capacity of new fruit plantings. Only the supply of wine grapes is expected to fall behind the increase in demand.

The production increases for rice and wheat, 5.9 and 5.0 percent, respectively, will both exceed the increase in demand. The increase in supply will be due mainly to an increase in yields through application of fertilizers and better control of weeds and pests.

Supplies of corn, barley, rye, and oats are generally expected to keep up with the demand, with a small improvement in yields and extension of cultivated areas. The supply of dry beans will exceed demand due to the improvement of yields, but the increase in the supply of other pulses will be lower than the increase in demand. The supply of tubers and vegetables is also expected to grow at a slower rate than demand, except for tomatoes. The supply of tomatoes is expected to meet the demand although due to the lack of data projections for the production of tomatoes could not be made.

Increases in the supply of beef, mutton and lamb, milk, sugar, and edible oils are expected to be of the order of 1.3, 2.0, 2.1, 2.2, and 3.2 percent per year, respectively, whereas the demand for these products will increase 4 to 5 percent per

year. Consequently, the supply of byproducts such as hides and skins, tallow and wool will reflect similar increases. Underlying these rates of growth are historical trends showing a slow increase in the number of animals and in yields. Present policies and plans may not be sufficient to substantially change Chile's agricultural production structure and to improve the supply.

Projected Trade

Imports of wheat are projected to decrease from the 1965 level of 385,400 metric tons but still remain at about 200,000 tons through 1980. In view of the recent severe drought and apparent underestimation of import requirements, it is more likely that 1970 imports will be about 425,000 tons. The 1980 imports may also be underestimated. In the case of rice, the moderate deficits of the past are projected to change into a small exportable surplus. While the projected achievement of a rice surplus by 1970 is very unlikely, over the longer run to 1980 Chile will probably be self-sufficient in rice and even produce a small surplus. Chile has been largely self-sufficient in corn but is projected to develop a small deficit by 1980. However, recent statistics seem to suggest that instead of the nearly balanced supply-demand position projected for 1970, the country may have to import over 200,000 tons of corn due to the severity of the recent drought. The 1980 deficit may also be greater than projected (table 2).

Substantial increases in imports are projected for edible oils, sugar, beef, milk and milk products, lard, and hides and skins. For potatoes, although the projections show a large increase in the supply-demand deficit, only a small proportion of this deficit will be translated into actual imports. An internal price adjustment to stimulate production or to decrease demand is more likely than a large increase in the volume of imports. Also, new and substantial imports of mutton and lamb are expected, while occasional imports of dry peas and chickpeas may be needed. Deficits are also expected to develop in supplies of wine grapes, but it is unlikely that Chile will import grapes. The relaxation of restrictions on planting new vineyards and some increase in the price of wine are more probable.

On the export side, fruits have constituted Chile's principal agricultural exports, and they are projected to expand considerably, particularly those of apples, peaches, table grapes, pears, plums, and lemons. Onions and lentils have also been exported, but these exports may decline in the future, while exports of pork and pork products will increase. Finally, dry beans, poultry meat, and eggs are projected to appear on the export list. No doubt some of the surplus shown for pork, poultry meat, and eggs may compensate for the deficit in beef production, so that actual exports of the former, or imports of the latter, will be smaller than the supply-demand balances indicate.

Chile is expected to balance its supply and demand of the other products included in the study, such as barley, oats, oranges, tomatoes, garlic, and tallow.

These projected commodity balances are valid only if the assumed rate of population growth continues. If it decreases to about 2 percent (the rate estimated by the Chilean Minister of Public Health for 1966 and 1967) actual imports in the projected years will be smaller and exports larger than the balances show. However, the effect of this lower population growth rate on commodity balances was not quantified in the study since no revised population projections were yet available when the study was being completed.

Some Study Implications

Supply and demand projections for Chile indicate that the country has the potential of becoming largely self-sufficient in agricultural production. It can also develop substantial new agricultural exports in addition to fruit exports. Both potentials, however, seem unlikely to be fulfilled significantly in the projected period. The chief obstacles to self-sufficiency are insufficient capital available on the farm level, an inadequate road network which restricts the produce market, government price policies, and uncertainty regarding land ownership which has accompanied the land reform now in progress. Some important improvements have been made in farming practices, but to change the situation substantially it will be necessary to offer new incentives to the farmers and to develop better marketing facilities.

The Latin American Free Trade Association agreements will tend to restrict imports of agricultural commodities from outside the region. However, the implementation of the agreements seems necessarily to be a slow process. Hence, Chile will probably remain a market for such U.S. exports as wheat, milk products, tobacco, prepared meats, edible oils, and breeding animals. The United States will continue to import from Chile fruits and vegetables, such as table grapes, melons, pears, onions, and garlic. But efforts will be made in Chile to further diversify its markets and sources of supply.

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Malagasy Republic's Agricultural Economy in Brief

By Fred Degiorgio

EIGN 290 FOREIGN REGIONAL ANALYSIS DIVISION FEBRUARY 1970

The Malagasy Republic is a land of substantial agricultural potential. Rice is the main crop and sizable gains in production are likely with the use of improved technology, particularly improved irrigation. The country's resources favor a large cattle population and prospects for increased commercial utilization of cattle are bright.

GENERAL ECONOMY

Agriculture is the principal occupation in the Malagasy Republic. Over 90 percent of the population is engaged in a largely traditional agriculture which accounts for about 54 percent of gross domestic product (GDP). Agricultural products, primarily coffee, rice, vanilla, spices, and sugar, make up 80 to 90 percent of the value of the country's exports.

The country's economy is estimated to be growing at about 3 percent yearly. GDP for 1967 was $730 million with per capita income at $115.

GEOGRAPHY

The world's fourth largest island, the Malagasy Republic is located in the Indian Ocean lying, at the nearest point, 250 miles off the southeast coast of Africa. The island is about the size of California and Oregon combined with an area of 230,035 square miles. It is 995 miles long and 360 miles wide at its broadest point. The country was known as Madagascar until obtaining independence from France in 1960 and it is authoritatively called either the Malagasy Republic or Madagascar.

Although the island lies in tropical latitudes, the altitude of the interior highlands gives much of it a temperate climate. The east coast is wet and warm. Cyclones are a regular occurrence. The center and west are also warm but drier. The south is generally dry with semidesert conditions in some areas. Average annual temperatures on the coast range from 70° to 80° F. while Tananarive on the plateau has a range of 55° to 67° F. Tananarive's rainfall is about half the 112 inches of rainfall at Tamatave on the coast. The country generally has rugged terrain, consisting mainly of a plateau which rises sharply from the narrow coastal strip in the east and descends slowly in a series of terraces to the Mozambique Channel in the west. Mountain chains run north and south with peaks ranging up to 9,450 feet, although the average altitude of the north-central high plateaus is 2,500 to 4,500 feet. The major rivers flow to the west coast. The east coast is almost straight and has very few anchorages.

The establishment of roads and railroads in the Republic has been made difficult by the mountainous terrain. Railroad mileage totals only 532. There were 24,855 miles of roads in 1966, of which only 5,592 miles are improved. Air transportation is extensively used, with 23 major airports. Rivers in the country are of no more than local importance to transport.

The island has 19 ports but only Tamatave, Diego-Suarez, and Tulear have deep-water quays. Tamatave is the east coast terminal for railroads serving the high plateau, the Pangalanas Canal, and east

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coast roads. The port handles over 40 percent of total tonnage. On the northwest coast, Majunga, although not a deep-water port, serves a large hinterland and handles 15 percent of the total tonnage, making it the second largest port.

PEOPLE

A mid-1969 United Nations estimate puts the Malagasy Republic's population at 7.2 million. The growth rate is 2.2 percent per year. Average density is 28 per square mile, with the greatest concentrations in the high plateaus and at points along the east coast. About 90 percent of the population is rural. Tananarive is the capital and with a population of about 322,000 is the only large city. Other towns are Tamatave, Majunga, Fianarantsoa, and Diego-Suarez with populations between 38,000 and 50,000. The Malagasy people are an ancient intermingling of Indonesian, Arab, and African immigrants.

AGRICULTURAL STRUCTURE

About 5 percent of Madagascar's total land surface is arable and permanently cultivated. Table 1 gives the major land uses.

The soils of the Malagasy Republic are generally heavy in texture, vulnerable to erosion, and poor in fertility. Red latosol soils cover the bulk of the highlands,

Table 1.--Malagasy Republic:
Land use, 1966

Use	Acreage
	1,000 acres
Cultivated land and land under permanent crops	7,166
Permanent meadows and pastures	84,014
Forested land	30,863
Other	23,015
Total area	145,058

Source: Production Yearbook; U.N. Food and Agriculture Organization.

part of the western savanna area, and much of the rainy tropical east coast, and have given the name of the Great Red Island to Madagascar. Most of the original forest in the central plateau has been destroyed by fire or cutting for fuel, resulting in severe erosion and severe silting of some rivers and lakes. The best soils are found in the drier western savanna and in the limestone Mahafaly plateau in the south, where precipitation, however, is deficient and erratic. There are some good soils of volcanic origin in various areas, and alluvials in the short eastern valleys, along the rivers of the west, and in silted-up river bottoms.

The predominant character of Malagasy agriculture is one of small traditional holdings, seldom larger than 5 acres. High concentrations of farms are found in the scattered areas of arable land. In areas not regularly farmed, "slash and burn" or "shifting" cultivation is practiced. This is called Tavy in Madagascar. There are a few large plantations of rice and cassava in the Lake Alaotra area, but small holdings make up the majority of farms. The Mahavavy River banks are the site of sugar estates, and sisal estates occupy the Mandrare River area.

The diversity of climate and terrain permits a wide variety of crops--both tropical and temperate. Tung oil, pepper, ylang-ylang, lemon grass, and cocoa are grown primarily on European holdings for export, while oil-bearing seeds, raffia, and beans are export crops grown by Malagasy farmers. Both European and Malagasy farms produce vanilla, coffee, cloves, tobacco, manioc, sugar, rice, and peanuts. Other food crops include corn, potatoes, taro, sorghum, bananas, vegetables and fruits. Sisal, paka, and cotton are the fiber crops grown in addition to raffia. Vegetable oils include coconut, castor, candlenut, peanut, and tung.

The average farmer uses very little fertilizer and his standard tools are the machete and spade. Oxcarts are standard carryalls. Animal-drawn plows are used on the rice and other farms of the high plateaus. This is also where 90 percent of the country's farm machinery is used--by the larger companies. Sugar plantations use over 50 percent of the farm tractors. In 1967, there were 2,000 tractors in the country.

AGRICULTURAL PRODUCTION AND MARKETING

Rice is the staple food in the Malagasy Republic and has been an important export in recent years. Annual per capita rice consumption in 1962 was estimated by the Food and Agriculture Organization of the United Nations at 320 pounds, one of the highest rates in the world. About 27 percent of the cultivated area is used for rice production. Rice is grown on about 1.95 million acres. About 84 percent of the rice is irrigated, with over half of this in the central highlands. Rice is also an important crop along the east coast and along the rich alluvial river valleys of the northwest. Average yields remain below 1 metric ton per acre. The Malagasy Government promotes increased rice production to meet domestic needs of about 900,000 metric tons annually and to provide export earnings. A luxury long-grain rice is exported. The Government guarantees to producers a support price of $36 per ton for standard grade paddy rice.

The Malagasy National Bank was established primarily to finance rice production. Most rice farmers require regular annual credit and are serviced through mobile banking units. Production levels of rice and other major Malagasy crops from 1959 to 1968 are given in table 2.

Cassava is second only to rice as a food crop and is useful in times of shortages since it can be left in the ground without spoilage and dug up when needed. Some of the cassava crop is exported as tapioca flour, and other dried and processed forms for use as starch, use in animal feeds, etc., primarily in Western Europe. Production is primarily in the Alaotra Plain, Mangoro Valley (around Tananarive), the highlands, and the west.

Coffee is the most important export crop. In 1968, coffee accounted for 38 percent of foreign agricultural sales. Robusta is the main variety grown. Coffee production which occupies over 6 percent of the cultivated area, is concentrated on the north and east lowlands and foothills. Production fluctuates because of variations in weather.

The Government sets the price paid to the producer, which varies according to grade and producing area. The coffee buyers, as a group, are obliged to buy all coffee offered, but they may act independently of each other. Exporters maintain their own warehouses and facilities for grading and processing. They arrange their own financing and either draw upon or contribute to the coffee stabilization fund, depending upon the world market price and International Coffee Agreement export quotas.

Sugar is an important export crop. It is produced primarily by large plantations, both European and Malagasy owned, in the northern river deltas and on Nosy-Be Island. After domestic consumption of about 35,000 metric tons yearly is satisfied, approximately 65,000 metric tons normally are left for export.

The Malagasy Republic has been marketing its sugar through the Joint Afro-Malagasy Organization (OCAM) sugar committee, formed in 1966 after France discontinued preferential arrangements.[1/] OCAM levies a small tax on sugar imported by member countries and a bonus is paid to the exporting countries, now only Madagascar and Congo (Brazzaville).

The Malagasy Republic is the world's major producer of vanilla. Exports of 961 metric tons in 1968 represented 11 percent of the value of agricultural exports. Vanilla production is largely concentrated in the northern tip of the island.

A vanilla marketing agreement was signed in late 1966 by the Malagasy Republic, France (on behalf of the Comoro Islands and Reunion), and the U.S. Vanilla and Flavoring Extract Manufacturers Association. The agreement established a system of export quotas and prices with the aim of stabilizing world vanilla prices, to avoid the previous wide fluctuations in price which had discouraged use of true vanilla.

The country produces about 30 percent of the world's cloves, primarily on Ile Sainte-Marie. Exports of cloves and clove oil were valued at $10.8 million in 1968.

1/ OCAM members are: Congo (Brazzaville), Congo (Kinshasa), Gabon, Central African Republic, Cameroon, Chad, Niger, Upper Volta, Dahomey, Togo, Ivory Coast, Senegal, Rwanda, and Malagasy Republic.

Table 2.--Malagasy Republic: Production by commodity and indices of total agricultural and food production, average 1957-59, annual 1959-68

Commodity	Average 1957-59	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons										
Rice, paddy	1,113	1,050	1,212	1,169	1,272	1,256	1,300	1,350	1,430	1,464	1,400
Corn	69	74	71	79	90	92	85	90	91	90	90
Beans, dry	20	23	21	22	20	23	22	29	39	32	34
Potatoes	73	68	75	75	75	67	109	98	100	100	100
Cassava	670	680	740	800	830	850	1,180	836	860	900	910
Sweetpotatoes	253	240	262	280	290	280	300	330	330	350	360
Tobacco	4	4	5	4	5	5	6	5	5	5	6
Cotton	1	1	1	1	1	1	2	3	2	3	3
Cottonseed	1	1	1	2	2	3	3	4	6	6	6
Peanuts, in shell	32	27	24	24	32	32	38	36	45	39	35
Castor beans 1/	1	1	1	2	2	1	1	1	1	1	1
Beans, lima	16	16	16	17	14	23	21	18	20	22	24
Bananas	158	165	128	130	130	140	140	155	180	170	165
Cloves	5	4	5	8	3	4	2	6	5	6	5
Pepper	1	1	1	1	1	1	1	2	2	2	3
Vanilla	2/	2/	2/	1	1	1	1	1	1	1	1
Coffee	53	50	56	48	60	50	63	55	52	66	57
Sisal	12	12	13	14	23	25	29	29	30	28	29
Sugar, raw	59	65	84	85	83	108	95	108	109	106	108
Clove oil	1	1	1	1	1	1	1	1	1	1	1
Tung oil	1	1	1	1	2	2	2	2	2	2	2
Copra	23	25	25	26	28	28	30	30	30	30	30
Meats	121	117	117	120	120	123	123	125	125	125	127
Milk	26	26	27	28	29	30	30	30	30	30	30
Indices of production	(1957-59 = 100)										
Crops	100	96	107	105	114	113	123	122	126	133	127
Total agriculture	100	96	105	104	112	111	119	119	122	128	124
Total food	100	97	106	105	112	113	119	119	125	127	124
Per capita agriculture	100	94	100	97	103	100	104	102	102	105	100
Per capita food	100	95	101	98	103	101	104	102	105	104	100
Index of population	3/ 100.0	102.2	104.4	106.7	109.1	111.5	113.9	116.4	119.0	121.7	124.3

1/ Exports. 2/ Less than 500 tons. 3/ 1958 population = 5,630,000.

Other important export crops include raffia, sisal, tobacco, peanuts, lima beans, and pepper.

Three-fifths of the Repuolic is used for grazing. In 1968 there were an estimated 9.7 million head of cattle in the country; most of them were Zebu. This is a large number in relation to population, but the cattle herd is economically underutilized. The cattle are considered to be relatively disease-free in comparison with African herds, primarily because the island is not plagued with the tsetse fly. Traditionally, there has been little selective breeding or pasture improvement. The cattle herd suffers from a low rate of increase due to a very low level of nutrition and high calf mortality. The average Zebu requires 6 years to mature to slaughter weight due to the lack of pasture and the hereditary characteristics of the Zebu. There are no fences to enclose grazing areas and pastures are of uniformly poor quality and extensively overgrazed.

The Government has recently been making efforts to improve the quality of the country's cattle by developing a breed tailored to Malagasy conditions, and at the same time developing a range management program. Other projects, including fattening stations, slaughterhouses, and developing export markets, are being considered to help the Republic realize more of its potential for beef production and exports. Trade delegations from several countries have visited the country to discuss the possibility of purchasing Malagasy beef.

Hogs, sheep, goats, and poultry are also raised, but not commercially.

FOOD CONSUMPTION

A 1959-61 ERS study puts the Malagasy Republic's per capita caloric intake at 2,400 calories per day, somewhat above the reference standard minimum established. This nutritional level, however, is not uniform throughout the country, with some areas being deficient, especially in protein and fats. The inadequate transportation system limits the movement of food from surplus to deficient areas.

AGRICULTURAL TRADE

The most significant point concerning the Malagasy Republic's foreign trade is the chronic deficit. Each year imports run 30 percent more than exports by value.

Agricultural products are the Malagasy Republic's principal exports, accounting for 80 to 90 percent of the value of all exports (table 3). Coffee, rice, sugar, vanilla, and spices dominate, and except for sugar, the export value of these commodities has been increasing gradually in recent years. Rice exports increased from $2.7 million in 1965 to $12.4 million in 1968. Malagasy exports 60 to 70 percent of the world's vanilla, mainly to the United States.

Imported agricultural products are primarily dairy products, eggs, wheat flour and meal, beer, and wine (table 4). Imports of farm products have declined from $26.0 million worth in 1965 to $15.5 million in 1967, mainly because domestic rice production has increased.

France is the Republic's most important trading partner, accounting for over 50 percent of both its exports and imports. As an associate member of the European Economic Community, Madagascar's trade with these countries is increasing.

The United States imports primarily coffee, vanilla, and cloves from the Malagasy Republic, and is its second best customer. U.S. imports of Malagasy farm commodities were valued at over $36.4 million in 1968; 1966-67 imports averaged $21.6 million. Coffee imports were valued at nearly $20.0 million in 1968, continuing an upward trend. Vanilla bean imports in 1968 totaled $8.9 million.

Exports of U.S. agricultural products to Madagascar, which are mainly in the form of grains for relief, are relatively insignificant. The largest amount was $1.2 million in 1965, decreasing to $124,000 in 1968.

AGRICULTURAL DEVELOPMENT AND AID

Agricultural policy features of the Malagasy Republic under the 5-year plan

Table 3.--Malagasy Republic: Quantity and value of principal agricultural exports by countries of destination, 1965-68

Commodity and country	Quantity				Value			
	1965	1966	1967	1968	1965	1966	1967	1968 =/
	1,000 metric tons				1,000 dollars			
Coffee	50.1	45.7	49.6	53.8	28,896	30,764	32,615	35,800
France	22.3	24.1	19.0	25.8	13,545	16,733	13,076	17,300
United States	21.3	16.0	26.5	21.7	11,595	10,319	16,883	14,300
Rice	10.9	19.6	40.0	69.3	2,737	4,263	7,507	12,400
France	9.1	11.7	11.4	13.4	2,487	3,139	3,055	3,600
Reunion	n.a.	n.a.	19.0	37.9	n.a.	n.a.	3,025	5,900
Comoro Islands	1.6	3.4	5.0	10.5	223	436	705	1,600
Vanilla	2/	.9	.7	1.0	2/	8,972	6,769	10,300
United States	--	.7	.4	.7	--	7,166	4,292	7,200
France	--	n.a.	.1	.2	--	n.a.	1,497	1,700
Cloves	2/	3.4	5.3	12.4	2/	2,345	3,545	7,900
Malaysia	--	n.a.	n.a.	5.1	--	n.a.	n.a.	3,100
Indonesia	--	n.a.	2.0	1.8	--	n.a.	1,293	1,200
United States	--	n.a.	1.3	1.6	--	n.a.	936	1,100
Sugar	36.0	92.0	80.0	56.0	4,890	9,350	8,655	6,400
France	24.1	26.8	16.9	7.6	2,711	2,068	1,258	500
Senegal	6.6	23.8	32.7	25.3	696	1,047	4,366	2,800
United States	6.5	7.7	7.9	8.7	759	949	961	1,000
Ivory Coast	n.a.	6.2	10.4	12.0	n.a.	814	1,393	1,700
Raffia	n.a.	6.7	7.2	5.9	3/	3,289	3,718	2,800
Sisal	28.7	23.3	20.2	25.0	5,427	3,943	2,920	3,000
Tobacco, unmfd	3.9	4.8	2.2	2.8	3,554	4,409	1,954	2,400
Clove oil	2/	.9	.7	1.2	2/	1,595	1,495	2,900
Peanuts	9.8	4.7	5.7	5.1	1,855	1,268	1,473	1,200
Lima beans	n.a.	16.5	8.2	10.1	3/	2,206	1,400	1,900
Bananas, fresh	19.6	33.2	21.5	12.5	1,040	1,632	1,067	700
Pepper	2/	1.1	1.5	3.1	2/	1,052	1,100	2,000
Meat & meat preparations	7.5	7.3	7.4	8.5	6,879	6,588	5,375	5,100
Hides & skins	2.5	3.2	2.0	2.5	1,076	1,852	1,218	1,300
Other agricultural exports					10,676	5,792	6,974	6,800
Total agricultural exports					81,335	86,265	87,785	102,900
Total exports					91,683	97,757	104,094	115,900

Source: Malagasy Ministry of Agriculture and FAS reports.
1/ Rounded to nearest 100,000. 2/ Spice exports in 1965, primarily vanilla and cloves, totaled 7,200 metric tons valued at $14.3 million. 3/ Contained in "other agricultural exports."

n.a. = not available.

Table 4.--Malagasy Republic: Quantity and value of principal agricultural imports, 1965-68

Commodity	Quantity				Value			
	1965	1966	1967	1968	1965	1966	1967	1968
	1,000 metric tons				1,000 dollars			
Meat & meat preparations	0.3	0.3	0.3	0.4	375	358	392	435
Dairy products & eggs	6.4	6.2	6.7	6.9	3,477	3,258	3,540	3,553
Rice	78.0	12.8	.0	.0	9,657	1,674	0	0
Wheat flour & meal	18.8	34.2	16.0	20.9	2,912	3,492	2,591	3,239
Cereal preparations	1.4	1.6	1.4	.8	838	969	656	778
Fruits & vegetables	1.2	1.2	1.4	1.4	587	620	709	694
Beer & wine	19.5	18.1	13.0	20.9	4,347	3,891	2,223	4,084
Tobacco, unmfd	.7	.8	.4	.5	424	502	343	302
Cotton	.6	.9	1.5	1.1	353	538	891	696
Vegetable oils	1.3	4.2	.7	.3	605	1,614	267	220
Other agricultural imports					2,516	2,803	3,864	3,232
Total agricultural imports					26,091	19,719	15,476	17,233
Total imports					138,116	141,303	145,284	170,219

Source: Statistiques du Commerce Exterieur de Madagascar, Annual.

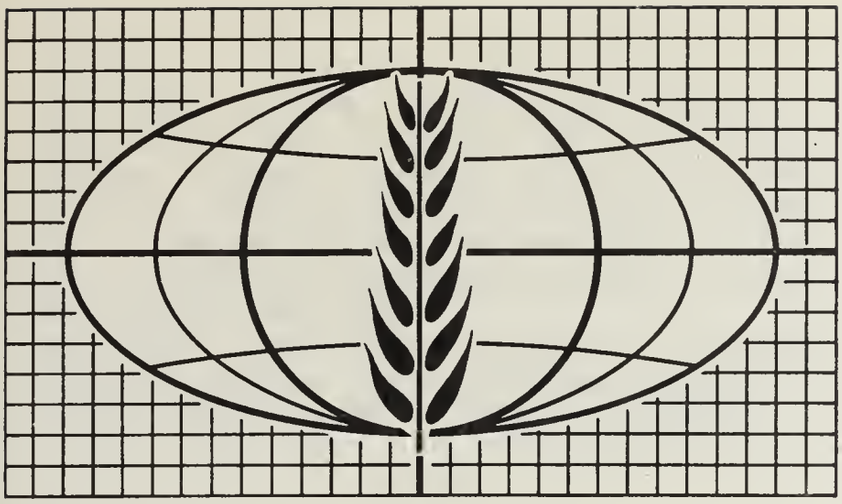
(1964-68) were: (1) to expand and improve upon the effectiveness of primary agricultural facilities and organizations; (2) to supply more adequately the farmers' needs for fertilizer, farm supplies and equipment, credit, and agricultural extension programs; and (3) to increase the quantity and quality of selected agricultural products.

One of the more successful agricultural development and marketing organizations is Malagasy Lake Alaotra Society (SOMALAC), established in 1961. It is concerned with the development of a part of the rice-growing area of the Lake Alaotra Basin, north of Tananarive. SOMALAC develops the land with machinery, resettles families on economic units of about 12.5 acres, furnishes credit for farm supplies, and furnishes technical guidance and information. By the end of 1967, over 12,300 acres had been reclaimed from marshland and settled. Some farmers in the area have attained rice yields of about 2.5 metric tons per acre.

A modern center near Tananarive conducts crop research, along with regional and specialized commodity research stations, including a specialized vanilla research station. There is also a livestock breedin and veterinary center. Agricultural education is offered on the secondary school level from which rural extension agents ar drawn. The University of Tananarive also offers agricultural courses.

France and the European Development Fund supply the major portion of the devel opment and technical assistance funds to the Malagasy Republic. U.S. assistance has been primarily in the field of agricultura education and extension.

A World Bank loan of $8 million for construction of 88 miles of roads and bridges will contribute to agricultural d velopment in the central plateau and the northwest. The scheduled completion date is 1971. Another World Bank loan of $2.8 million, signed in January 1969, is being used to promote cattle production on a co mercial scale. Six cattle ranches rangir in size from 49,000 to 62,000 acres, will be established for breeding and fattening purposes. Initially, the Government will own and operate the ranches, but eventual they will be broken into 2,470-acre units for private ownership.



ERS-Foreign 291

THE AGRICULTURAL SITUATION IN WESTERN EUROPE

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

ABSTRACT: Agricultural output in Western Europe remained at a high level in 1969. Wheat and milk surpluses continued to mount. Agricultural imports are tending to stabilize while agricultural exports increase. Imports of feed grains may decrease further in 1970. Monetary instability in the European Community in 1969 led to emergency trade measures which set back its Common Agricultural Policy. Negotiations aimed at expanding EC membership are expected in 1970.
KEY WORDS: Agricultural production in Western Europe, outlook for West European trade, European Community Common Agricultural Policy, expansion of the European Community.

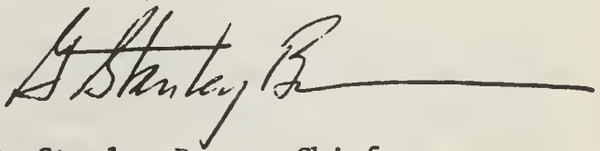
FOREWORD

The Agricultural Situation in Western Europe: Review of 1969 and Outlook or 1970 focuses on major agricultural and economic developments of concern to .S. agricultural interests. The information provides an analytical basis for nortrun policy decisions and furnishes information about current agricultural nd trade developments in the major commercial marketplace for U.S. agricul-ural exports.

This report was prepared under the direction of Fletcher Pope, Jr., Leader, ituation and Outlook Section, and the supervision of Reed E. Friend, Leader, emand and Competition Section. Participating in the preparation of the report ere Cynthia A. Breitenlohner, Virginia G. Carter, Marshall H. Cohen, Doris H. eter, James Lopes, Donald M. Phillips, and William P. Roenigk.

Acknowledgment is extended to the Foreign Agricultural Service for assist-nce provided, especially by Agricultural Attache personnel who supplied much f the basic data.

The Agricultural Situation in Western Europe is one of five regional sup-lements to The World Agricultural Situation: Review of 1969 and Outlook for 970, FAER 57. Other regional reports will be published on the Communist areas, frica and West Asia, the Western Hemisphere, and the Far East and Oceania. ata may vary slightly from those in The World Agricultural Situation, as this eport is based on information available as of March 1, 1970.



G. Stanley Brown, Chief
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ABBREVIATIONS

CAP.....Common Agricultural Policy of the European Community.

CXT.....Common External Tariff of the European Community.

EC.....European Community. (Members: Belgium, Luxembourg, France, Italy, The Federal Republic of Germany or West Germany, Netherlands. Associate members: Greece, Turkey.)

EFTA.....European Free Trade Association. (Members: United Kingdom, Austria, Denmark, Iceland, Norway, Sweden, Switzerland, Portugal. Associate member: Finland.)

FEOGA....European Agricultural Guidance and Guarantee Fund of the EC.

GAP.....Gross Agricultural Product.

GATT.....General Agreement on Tariffs and Trade.

GDP.....Gross Domestic Product.

GNP.....Gross National Product.

OECD.....Organization for Economic Co-operation and Development. (Members: Th United States, Canada, Japan, Turkey, Yugoslavia, and all West European countries.

TIME REFERENCES

Statistics refer to a calendar year unless otherwise indicated. When split y (July 1 to June 30) data are used, they are identified with a diagonal stroke such as 1968/69. Hyphens, such as 1967-69, indicate averages for several yea

WEIGHT AND MEASURE REFERENCES

The metric system of weights and measures is used in this report unless other wise indicated. The following are conversions to the U.S. system of weights and measures: 1 hectare is equal to 2.471 acres, 1 quintal is equal to 220.4 pounds, and 1 metric ton is equal to 2204.6 pounds.

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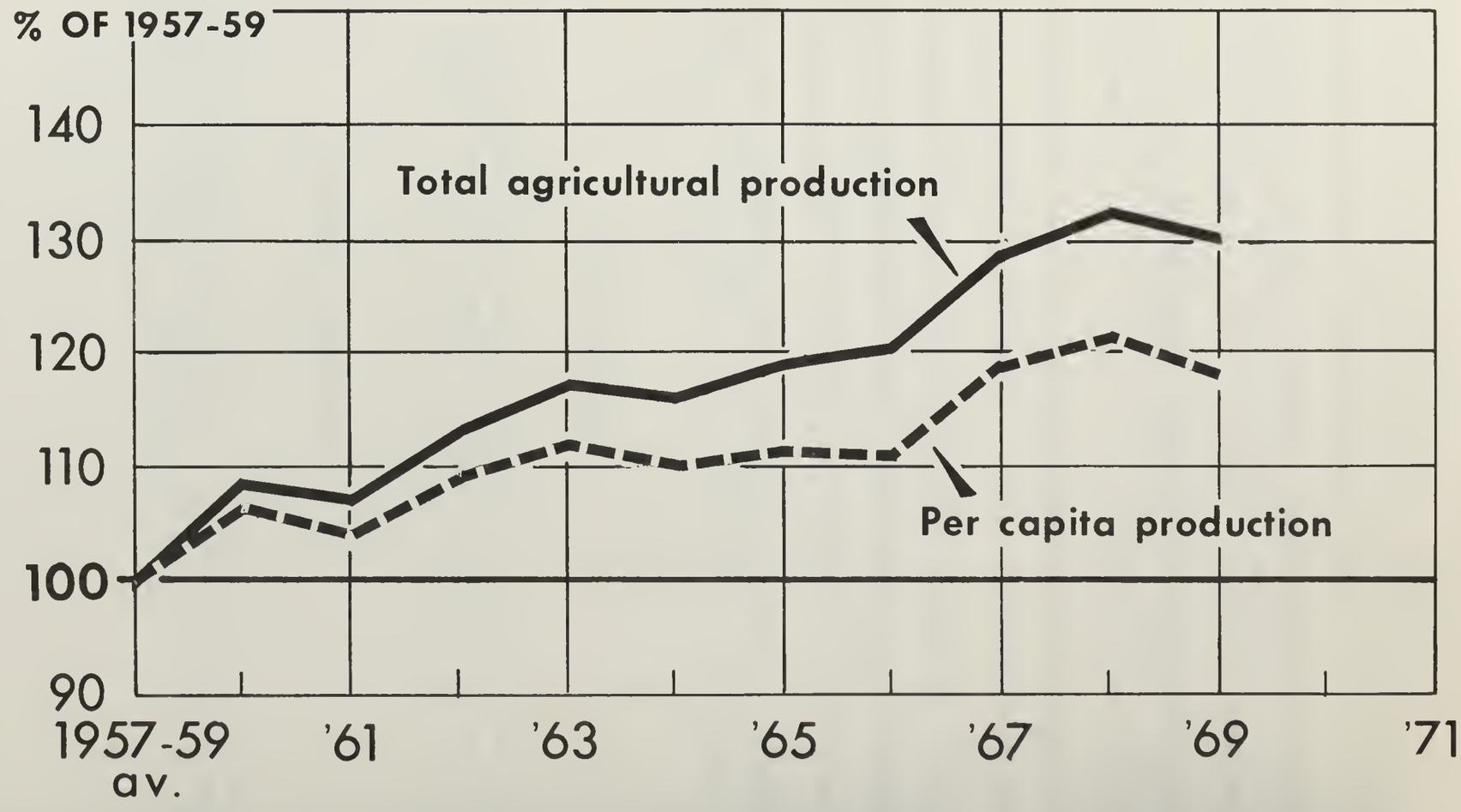
April 1970

WESTERN EUROPE: TOTAL AND PER CAPITA AGRICULTURAL OUTPUT



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 7560-70 (2) ECONOMIC RESEARCH SERVICE

SUMMARY

Western Europe's agricultural production in 1969 declined moderately from the record achieved in 1968. Less favorable weather was the primary factor. Grain and meat output may increase in 1970.

Grain production for Western Europe totaled 120 million tons in 1969--down a million tons from the record harvest a year earlier. Wheat production exceeded 45 million tons--5 percent below 1968--while feed grain production rose to a record 68 million tons. The area had been decreased for wheat, expanded for feed grains.

Western Europe's meat production approximated 16 million tons in 1969, slightly below 1968 output. Both pork and mutton-lamb output declined. Poultry meat production reached a record level estimated at 2.7 million tons. Output of milk was estimated at 114 million tons, about equal to output in the previous year.

Although Western Europe is a grain deficit area, the European Community, Austria, Finland, Greece, and Spain have surpluses of soft wheat. Wheat stocks in the EC totaled 10 million tons at the beginning (August 1) of the 1969/70 marketing year--3 million more than a year earlier. The buildup is due to high price supports for wheat, price ratios favoring wheat over feed grains, large world supplies of wheat, and generally favorable growing conditions. The EC is working on new policies to reduce soft wheat supplies, which are a heavy financial burden to its agricultural fund.

For dairy products, the major surplus area is the European Community, which had butter stocks of 345,000 tons and nonfat dry milk (NFDM) stocks of 340,000 tons on January 1, 1970. To reduce the dairy oversupply, the EC is using subsidies to encourage increased cow slaughter, reduced marketings of milk, increased consumption of butter, and wider use of NFDM in feed. Other West European countries with dairy surpluses include Austria, Ireland, Sweden, and Finland.

Monetary instability brought an 11.1 percent devaluation of the French franc in August 1969 and a 9.3 percent revaluation of the German mark in October 1969. Since the CAP sets common prices for major agricultural products in terms of units of account, emergency measures were necessary to avoid disruption of the elaborately constructed common agricultural market. For France, the support price for most agricultural commodities was not increased (to avoid inflationary pressures and increased surpluses) but all prices are to be aligned with common prices by August 1971. During this period, import subsidies and export taxes are being applied to equalize French and Community prices. To avoid an immediate drop in agricultural support prices in West Germany, prices were frozen at the pre-revaluation level and compensatory import taxes were imposed on most commodities covered by the CAP. Although the measures for West Germany were discontinued on January 1, 1970, farmers will be compensated for resultant income losses through 1974.

During 1969, the European Community proposed an internal agreement for fats and oils. The intention was that developed countries impose a tax on imports of

oilseeds, oilmeal, oilcake, and fats and oils (excluding butter and olive oil). Such an agreement would tend to achieve the same objective of the Community under its previously proposed internal consumption tax on protein meal and various fats and oils--that is, the substitution of butter for margarine and of surplus grains and NFDM for protein meal.

The European Community's financial agreement on the CAP in late 1969 and early 1970 was a significant achievement. It provided for some reallocation of FEOGA costs among member states. By January 1, 1978, the Community is to be entirely financed from its own sources of revenue rather than relying on some contributions from member states. Funding will be through Community receipts of import levies, customs duties, and a part of the tax on value added (TVA). In addition, the European Parliament is to be given minor control over the EC budget. The financial agreement does not provide for any limitations on FEOGA expenditures.

EC countries have committed themselves to membership negotiations in 1970 with the United Kingdom, Ireland, Norway, and Denmark. The outcome has far-reaching aspects for many countries other than those directly involved. Trade agreements completed with Yugoslavia, Israel, and Spain require only ratification. Discussions are currently taking place with the United Arab Republic and other countries. Preferential trade agreements renewed in 1969 include the Yaounde Convention with the Associated Overseas Countries of Africa and the Arusha Agreement with the East African Community.

Upcoming membership negotiations between the European Community and the United Kingdom, Ireland, Denmark, and Norway will have an impact on the future of EFTA. This trade area, in existence 10 years, has been largely restricted to the elimination of trade tariffs on nonagricultural items. However, some processed agricultural commodities are freely traded; bilateral trade agreements between EFTA members on agricultural commodities have been encouraged.

Western Europe's agricultural imports totaled $22 billion in 1968, about equal to the 1967 level. On the other hand, agricultural exports amounted to $10.4 billion--up almost 6 percent. Imports of U.S. farm products by Western Europe peaked at almost $3.1 billion in 1966 but declined to $2.6 billion in 1967 and $2.5 billion in 1968. A further decline probably occurred in 1969. European takings of U.S. wheat, feed grains, fruit and vegetables, and cotton have declined in recent years.

Economic expansion in Western Europe is expected to continue at a high rate in 1970. Some countries will need to guard against excessive demand pressures. Barring accelerated deterioration of the Italian balance of payments, major monetary adjustments, such as those in 1969, are unlikely in 1970.

The shift in area from wheat to feed grains is expected to continue in 1970 and the total grain harvest may increase somewhat. Quality wheat imports probably will hold firm, but feed grain imports may fall. Prospects are bright for imports of oilseeds (and cake and meal), especially soybean imports from the United States. Meat production (particularly pork and poultry) is expected to increase in 1970. Milk output, already excessive, may stabilize at the 1969 level.

THE AGRICULTURAL SITUATION IN WESTERN EUROPE
Europe and Soviet Union Branch
Foreign Regional Analysis Division
Economic Research Service

AGRICULTURAL PRODUCTION REMAINS HIGH

In 1969, for the third consecutive year, agricultural production remained at a high level in Western Europe but failed to equal the record achieved in 1968. Less favorable growing conditions were primarily responsible for a modest decline in the index of agricultural output. Among the EC countries, production in 1969 in West Germany and France was somewhat smaller than in 1968. Production in the Scandinavian countries, except Finland, and in Portugal, was substantially less than the record achieved in 1968. Agricultural output in Greece showed a partial recovery from the drought-induced level of 1968 (table 1).

Total grain production for all of Western Europe remained at a near record level of approximately 120 million tons. 1/ Somewhat smaller harvests of wheat and rye were largely offset by increases in feed grain crops. Wheat production in 1969 dipped for most countries--the total output for Western Europe declining by about 5 percent, primarily because of smaller crops in Spain, France, and Portugal. The lower production reflected the reduced wheat area, although yields were lowered somewhat by dry weather during part of the growing season. 2/

Feed grain production rose to a record level in Western Europe, largely due to acreage expansion. Barley, which dominates feed grain production, continued its uptrend in output and increased to 39 million tons, about 14 million above the 1960-64 average. France and West Germany turned out barley crops above the 1968 level--contributing heavily to total feed grain increases in the EC. 3/ Barley output recovered in the United Kingdom and Greece and rose to record levels in Spain, Denmark, Austria, and Finland. Corn production in Western Europe showed a greater increase than barley, reaching a record of nearly 14 million tons. The increase in corn reflected larger crops in Italy, France, and Austria.

Both area and production of potatoes in Western Europe declined further in 1969. The 56-million-ton harvest was over 7 million tons below the 1968 crop. Sharp declines were noted for France, West Germany, and Sweden. Sugar beet production in 1969 dipped below 1968 but remained at a high level (69 million tons) with area holding about the same. Most producing countries experienced declines, but the decreases were most significant in West Germany, Italy, the United Kingdom, and Sweden. Large increases were registered by Greece and Spain. Olive oil production in Western Europe declined by 6 percent as increased output in Portugal was offset by a sharp decrease in Spain.

1/ Tons in this report are metric unless otherwise indicated.
2/ For statistics on the area and production of selected crops in Western Europe see table 2 (in appendix).
3/ The terms EC, European Community, Community, Common Market, European Economic Community, and EEC are used interchangeably in this report.

Table 1.--Indices of agricultural production in Western Europe, 1965-69 1/

(1957-59 = 100)

Country or area	1965	1966	1967	1968	1969 2/
Belgium-Luxembourg	108	110	123	123	120
France	131	126	139	144	141
West Germany	108	112	123	126	123
Italy	115	117	126	123	124
Netherlands	119	124	133	138	141
Total EC	118	119	130	132	131
Austria	104	119	125	130	131
Denmark	117	117	118	122	117
Finland	129	120	126	133	135
Greece	135	134	143	123	132
Ireland	106	109	121	124	123
Norway	110	107	107	118	108
Portugal	103	91	110	112	107
Spain	114	129	135	148	147
Sweden	116	105	118	122	108
Switzerland	107	112	121	125	123
United Kingdom	132	131	137	134	135
Total Western Europe	119	120	130	132	130

1/ West European regional price weights were used in calculating these indices of agricultural output. Also, the indices are limited in coverage to 12 to 18 crops and livestock products. Thus, these indices will differ from those calculated by the various countries.

2/ Preliminary.

Western Europe's meat production was sustained at a high level in 1969--about 16 million tons. 4/ Beef and veal production remained at 6.5 million ton while pork production at 8.2 million tons was down slightly in 1969. Larger amounts of beef and veal in most West European countries, but particularly in West Germany, Portugal, Finland, and Italy were offset by decreases in France, the United Kingdom, and Denmark. Drought in some countries--notably Sweden--led to increased slaughtering of cattle. Pork output declined last year in Western Europe--particularly in France and West Germany. In the EFTA, production was down mainly because increases in Portuguese and Finnish output did not offset a sharp decrease in Danish pork production.

The rapid expansion of poultry output--especially of broilers--in most Wes European countries and a slowdown in the growth of consumption have led to a

4/ For statistics on production of principal livestock products in Western Europe see table 3 (in appendix).

ess buoyant market for poultry meat. Total poultry meat production hit 2.7 illion tons in 1969--a new record--compared with an average of 1.5 million in 960-64. In recent years, there has been a rapid expansion in West German roiler production, reflecting an increase in consumption. Production also ontinues high in France, Italy, the Netherlands, Spain, and the United Kingdom.

Output of cow's milk is estimated at 114 million tons, no significant hange from 1968. In some West European countries, the warm, extended autumn avoring pasture conditions resulted in higher production offsetting declines n other countries. Although Italy's outturn probably declined, production in he EC is estimated to be about the same as in 1968. In Scandinavia, lower ilk production was realized in most countries. In Denmark and Sweden, cow umbers have been declining in recent years. Milk production in Finland prob- bly reached a higher level than in 1968.

WHEAT SURPLUSES IN WESTERN EUROPE

Although Western Europe is a grain deficit area, surplus production of soft heat plagues some countries. Most seriously affected is the European Community, hich accounts for two-thirds of Western Europe's wheat production. Other areas ith current or recent surpluses of soft wheat include Austria, Finland, Greece, nd Spain.

uropean Community

Wheat production in the EC, as well as in Western Europe as a whole, has xpanded at a relatively rapid pace in recent years (figure 2), far outdis- ancing any rise in domestic utilization and exports. As a result, soft wheat tocks in the EC on August 1, 1969, were an estimated 10 million tons against 7 illion a year earlier.

Storage problems centered in West Germany: Soft wheat stocks in the EC ere traditionally held primarily by France. During 1968/69, however, West erman grain importers reacted to the weak French franc and liberal credit erms by buying large quantities of wheat from France. It was profitable to urn the imported wheat over to West German intervention agencies at a higher han cost price. Consequently, over twice as much wheat moved from France into est Germany in 1968/69 than a year earlier. 5/

The increased import of French wheat created pressure on storage facili- ies, forcing West Germany to request EC Commission authorization to impose im- ort levies on wheat from EC-member countries. While the Commission did not rant this action, it did allow West Germany to apply Intervention "B" proce- ures on German wheat. Under them, wheat can be held by private granaries and ffered to the government intervention agency later in the season at a guaran- eed price (including coverage of storage costs). Usually, wheat is stored by

5/ For statistics on total imports and exports of various agricultural pro- ucts by Western Europe, see tables 4 and 6 (in appendix). Also, for imports f agricultural products from the United States by Western Europe, see table 5.

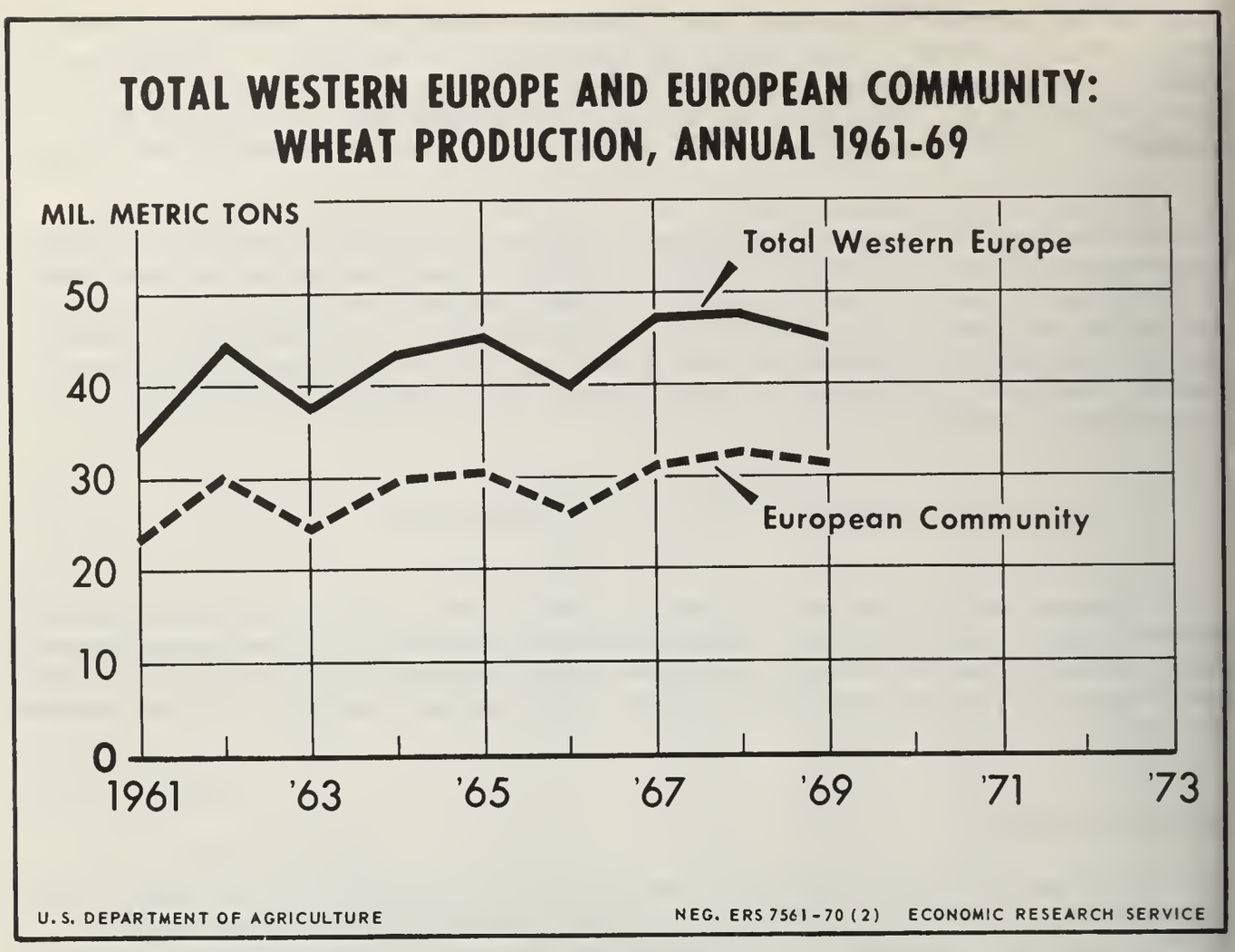


Figure 2

the EC under procedures called Intervention "A," which allows the wheat producers at harvesttime to deliver the wheat directly to government storage.

In August 1969, the French franc was devalued 11.1 percent, largely eliminating the pressure on the wheat flow into West Germany. By then, however, more than 6 million tons of grain in West Germany had been covered by Intervention "B." Soft wheat held under Intervention "A" in West Germany through the end of October 1969 totaled 591,000 tons, compared with 130,000 tons a year earlier.

The deutsche mark revaluation in October 1969, created a potential loss for persons holding Intervention "B" stocks. However, the EC Commission agreed that contracts concluded under Intervention "B" would be reimbursed by FEOGA against losses incurred as a result of the revaluation. This guarantee applied to grain sold on the open market as well as grain offered for government storage.

Causes of soft wheat surpluses: Soft wheat surpluses in the Community are directly related to extremely high producer prices. The common grain prices which went into effect for the EC on July 1, 1967, represented a major increase

in grain prices for France--the EC's largest grain producer. Farm prices for soft wheat in France, for example, averaged $92.60 per ton in 1968/69, more than 35 percent above the average U.S. producer price. The Community's variable import levy protects domestic producers from outside competition, intervention (support) prices provide a guaranteed price for unlimited production, and export subsidies are flexible to meet the competition in any market.

Wheat:feed grain price ratios in the EC favor the production of wheat and contribute to surplus soft wheat production. This price ratio, however, has been lowered in recent years by holding the target price of wheat stable while increasing the price of feed grains. Grain price adjustments have not been sufficiently large to encourage any widespread shift of land from wheat to feed grains or to establish realistic price relationships based on the relative feeding value of wheat and feed grains. Nevertheless, they have resulted in higher threshold prices (minimum import prices) for feed grains and thus increased protection for Community grain producers.

Large world supplies of wheat in recent years have hampered any expansion in EC wheat exports to third countries. The Common Market's surplus wheat is of lower quality than wheat available from other major exporters and is shipped primarily to Mainland China, Algeria, Eastern Europe, and the United Kingdom (feed wheat). During 1969, heavy export subsidization by the EC occasionally pushed the export price below the minimum level specified in the International Grains Arrangement.

Solving the surplus problem: A significant part of the EC's expenditure in its agricultural fund can be attributed to wheat. Of an estimated total expenditure of $2.4 billion in 1968/69, around $700 million was spent on price support measures and export subsidies for grain. Total FEOGA costs, as well as costs relating to wheat, are expected to rise to a higher level in 1969/70.

The EC Commission recently proposed several measures designed to reduce agricultural surpluses. One proposal relating to grains is to lower the basic intervention price for wheat and rye by $2 per ton. This action would lower producer prices of wheat and make wheat somewhat more competitive with feed grains. It was also proposed that actual market intervention for wheat (also rye and barley) be limited to the last 4 months of the marketing year and that the number of intervention points throughout the Community be reduced to a few port locations. These limitations would result in a relatively free internal market for most of the year. However, domestic producers would be protected as before from third-country competition by the high threshold price/levy barriers.

By March 1, 1970, no action had been taken on the Commission's proposals, which encountered sharp criticism from numerous farm groups. Regardless of the outcome, surplus soft wheat problems in the EC will continue for some time.

The use of wheat for livestock feed in the EC is also being promoted to dispose of surplus wheat. The denaturing subsidy for wheat has been increased to about $20 per ton for the 1969/70 marketing year. In the Netherlands and some parts of West Germany, the 1969 wheat crop was affected by unfavorable weather at harvest resulting in considerable sprout damage. Requirements for grains to qualify for a denaturing premium were relaxed and sizable quantities of damaged wheat were denatured for either domestic use or export.

Austria, Finland, Greece, and Spain

Austria's wheat surplus, together with carryover stocks from preceding years, may total around 500,000 tons in 1969/70, equivalent to about two-thirds of normal requirements for a year. Finland's carryover stocks of wheat on August 31, 1969, exceeded 300,000 tons, more than half of normal annual production. Greece's wheat surplus was one of its most serious agricultural problems in the mid-1960's. The wheat problem has not been apparent in the last 2 years because of sharp decreases in production, primarily due to unfavorable weather. However, increased yields, along with declines in consumption, could cause surpluses to reappear. Spain is a large surplus producer of wheat (and barley). Its wheat stocks reached a high of 2.4 million tons in December 1968, but declined to about 1.7 million tons in July 1969.

Causes of the problem: The causes of wheat surpluses in these four countries are essentially the same: Rapid increases in production as a result of more and better inputs and favorable weather, while maintaining or in some cases expanding wheat area. Also, government policy has been extremely favorable to wheat production. In Spain, for example, the ratio of the price support for wheat to other grains has been so favorable that wheat has been grown on irrigated land.

Solving the surplus problem: To reduce the soft wheat surplus, Austria, Finland, Greece, and Spain have been subsidizing wheat for export and feed uses, as well as introducing some controls on production. Austria disposes of part of the excess wheat stocks through feeding by limiting feed grain imports and forcing the mixed feed industry to blend barley with domestic wheat. However, Austria had a record feed grain crop in 1969 and mixing regulations may not prove practical. Finland agreed in late 1969 to export 40,000 tons of wheat to the United Kingdom at a price of $50 per ton, and is attempting to export another 50,000 to 100,000 tons. Also, marketing fees have been imposed on wheat deliveries and voluntary restraints have been sought on planting wheat. Spain's subsidized wheat exports set a record of about 1 million tons in 1967/68, and annual use of wheat for feed has been as high as 400,000 tons the last 3 years. Feed grain support prices have been raised relative to those for wheat.

Impact on World Trade

Increased production of soft wheat in countries of Western Europe primarily affects grain exporters, including the United States, by competing with the U.S. and other wheat and feed grain suppliers in export markets.

Surpluses of wheat in Western Europe are limited to soft wheat. Although the Community is promoting the production of quality wheat by guaranteeing producers $145 per ton for durum wheat, net imports of quality wheat approximate 4 million tons annually.

The continued expansion of soft wheat production at higher than world prices without a parallel expansion in domestic demand--a situation particularly characteristic of the EC--leads to pressure for heavy export subsidization. Increased competition in international markets, brought about by high export subsidies, results in unstable world prices, like those during 1969 under the IGA.

Efficient exporters find their traditional markets being eroded by countries who produce surpluses under high price supports unaccompanied by production controls. Displacement of a country from its traditional markets causes its export activity to shift to other markets, creating increased pressures for other traditional trading arrangements. This type of activity is particularly unsettling to world trade when wheat supplies are at record levels.

Soft wheat surpluses are also being exported for use as feed. For example, in 1968/69 the EC exported 560,000 tons of wheat to the United Kingdom primarily for use as feed. Wheat imported for feed lowers feed grain import requirements by at least an equivalent tonnage.

Soft wheat is also being diverted to feed use in the countries producing the surpluses. The EC will likely use 8 million tons of wheat for feed in 1969/70 compared with 5.8 million tons in 1968/69. Combined with the increased use of low-cost feed grain substitutes--such as corn gluten and manioc--a substantial tonnage of feed grain imports will be displaced in 1969/70.

The core of the problem is the high grain price policies pursued in these countries. Not only do the high prices stimulate production but they also dampen wheat and feed grain utilization. In a comparison of the per capita consumption of all grains 6/ for 1967/68--consumed directly or indirectly through livestock products--the figure for the United States (.723 ton) was nearly 70 percent above that of the EC (.430 ton).

WESTERN EUROPE STRIVES TO REDUCE ITS DAIRY SURPLUS

West European milk production increased rapidly during the 1960's (figure). With substantial dairy surpluses continuing in Western Europe, particularly n the European Community, programs are being implemented to equate supply with emand. Perhaps the greatest success has been achieved in Switzerland. The uropean Community's belated start in controlling surpluses has achieved little uccess to date.

uropean Community

Although the rapid rise in the EC's milk production slowed in 1969 partly ue to weather and feed conditions, stocks of dairy products became more burdenome. Milk production in 1969 at 74 million tons and January 1, 1970 stocks of utter at around 345,000 tons were only slightly higher than a year earlier. owever, stocks of NFDM were 340,000 tons, much higher than on January 1, 1969. hen the CAP for dairy products began in November 1964, stocks of butter were nly about 80,000 tons.

Increased milk deliveries to processors: Accentuating the oversupply of airy products last year was the increased percentage of milk delivered to airies. More than 77 percent of the milk produced was delivered to dairies in

6/ Wheat, oats, barley, corn, and sorghum for the United States and all grains xcept rice for the EC.

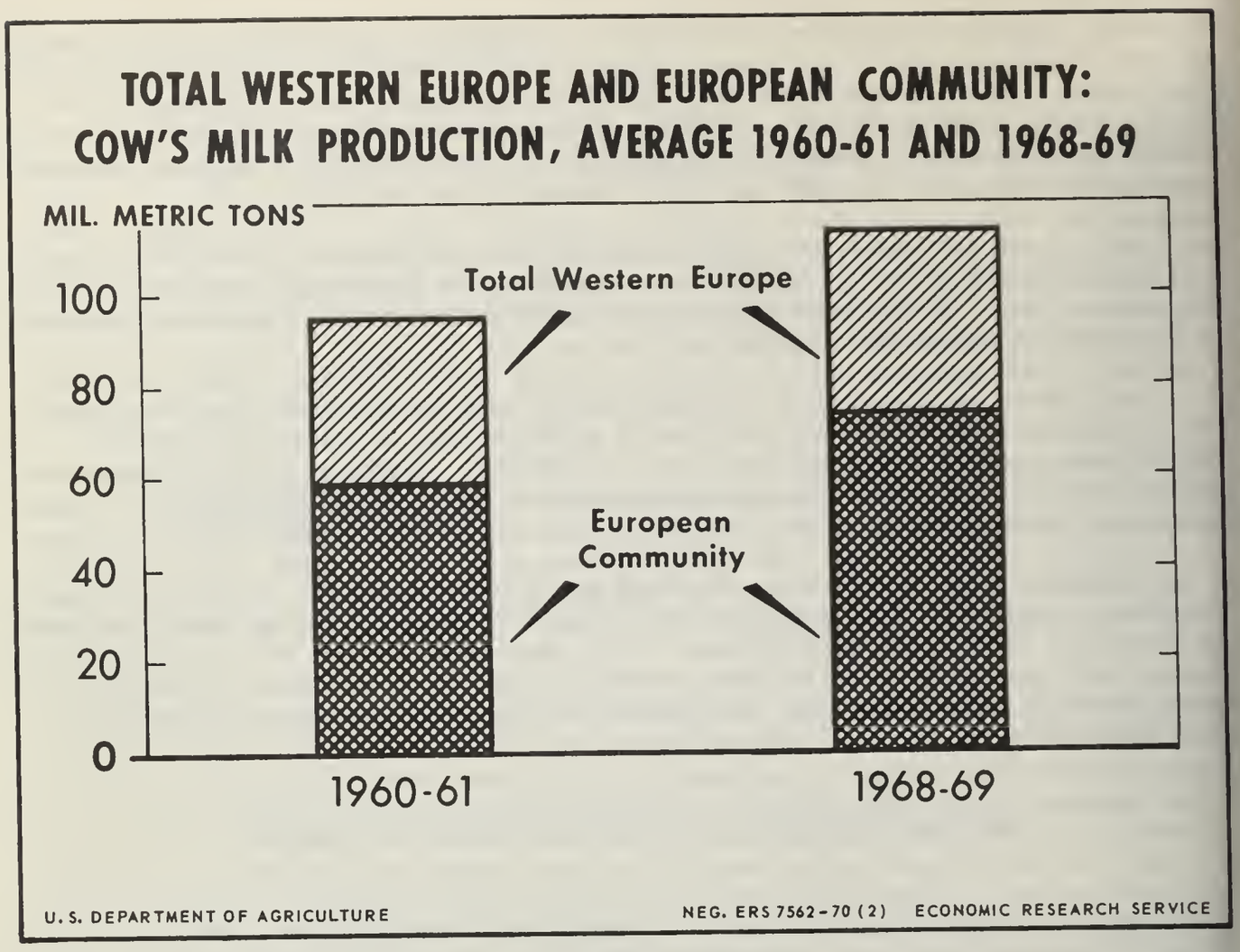


Figure 3

1969 compared with 75 percent in 1968 and about 70 percent in 1964. This trend may continue if high returns for off-farm marketing of milk persist.

Producer price levels for milk in the EC probably improved slightly in 1969 as demand for dairy products was relatively good. Because fluid milk and cream for consumption are not fully covered by the dairy CAP, member states may increase the producer's total receipts from milk by raising the price paid for fluid milk. Since milk utilized for fluid consumption accounts for more than 20 percent of total production, this added source of return can be important.

Milk production important to farm income: Milk production is the single most important source of agricultural income in the EC--about 20 percent of total agricultural income. Most Community farmers with less than 5 hectares of land are engaged in dairying, since this activity usually provides good utilization of family labor and rather high income per hectare of land.

In recent years, a fourth of the dairy farmers have had 5 cows or less, and in turn, have accounted for more than 20 percent of total milk production.

lso, more than half of the dairy animals are in farm herds of 10 cows or less nd only 5 percent are in farm herds larger than 50 cows.

Community program to reduce dairy surpluses: In 1969, the EC approved easures to reduce the dairy oversupply and encourage farmers to switch from ilk to beef production. The measures involve subsidies to encourage (1) cow laughtering and the nonmarketing of milk; (2) consumption of cold storage but- er; and (3) greater use of NFDM and butter in calf, pig, and poultry feeds.

Subsidies for cow slaughtering (to encourage smaller dairy farmers to leave arming) and nonmarketing of milk (to encourage larger dairy farms to switch to eef production) are initially limited to 250,000 cows under each measure. Un- er the slaughter subsidy, farmers owning at least 2 cows will receive $200 for ach cow slaughtered--with a limit of $2,000 to any farmer. To qualify for the ubsidy, the farmer must have ceased milk production before April 1970. Appli- ations for this subsidy were filed in December 1969 for slaughterings carried ut during February-April 1970.

Farmers owning more than 10 cows will receive $200--in five installments-- or each cow in his herd (no limit) if he agrees to stop marketing milk and milk roducts and to maintain or increase the number of mature cattle in his herd. A urther condition for receiving this subsidy is that the quantity of milk and ilk products marketed in the preceding 12 months exceeded 22.7 tons (milk equiv- ent) with an additional 2 tons added for each cow after the eleventh. For pro- ucers with less than this output, a diminishing sliding scale is used in com- uting the subsidy paid. A slaughtering subsidy and a subsidy for withholding ilk from the market cannot be paid to the same farmer. Of the total cost of hese subsidies--$100 million--half will be met from the Guidance Section of EOGA and half from the member states.

Preliminary indications showed that applications for these measures more an exceed the allotted 250,000 cows for each regulation. Applications for w slaughterings in the EC have totaled more than 290,000, of which West Ger- ny accounts for 169,000 and France 50,000. Removing 500,000 cows (by slaugh- ring or nonmarketing of milk) from the EC dairy herd would represent more than 5 percent of total annual milk production and the "removal" of 250,000 cows by aughtering would represent about 70,000 tons of beef, or about 1.5 percent of tal annual beef production. It is too early to determine how beef production subsequent years will be affected by this program. Improvements in milk elds could offset any decrease in milk production as a result of the subsidy ogram.

The Commission has authorized sales of cold storage butter at reduced prices consumers in West Germany, France, and the Netherlands. In November 1969, for ample, 57,500 tons of cold storage butter were authorized for sale (27,500 tons West Germany, 20,000 in France, and 10,000 in the Netherlands). Prices at orage locations were about 60 cents per pound in West Germany and about 50 nts per pound in France and the Netherlands, compared to the intervention ice of about 80 cents per pound or the usual retail price of 90 cents to $1. addition, Belgium was authorized to sell butter oil (no specific quantity mits) since it was felt that the sale of cold storage butter would depress e normal marketing of butter.

Measures to dispose of surplus butter include reduced butter prices to bakeries, hospitals, military, and exporting firms; free milk to schools; and aid to developing countries--in the form of butter oil and NFDM. This program to replace tallow with butter in manufactured feed has been unsuccessful since this operation requires special equipment which the industry presently lacks.

Considerable quantities of NFDM are used to manufacture calf feed in the EC but progress in using NFDM in pig and poultry feed has been limited. France and Belgium used some NFDM for pig feed in 1969 when the denaturing subsidy was sufficient to make NFDM competitive with other protein sources. Until recently feed regulations prevented NFDM use in manufactured feed in West Germany, which has the largest number of pigs in the EC.

NFDM production decreased 7-8 percent in 1969, but stocks trended upward as EC exports slowed due to a reduced export demand and larger world supplies. For example, Japan--a traditional importer--faced a surplus of domestically produced NFDM by the end of 1969. With low world prices, exporting countries have negotiated an agreement under GATT on a minimum world price--$200 per ton (9 cents per pound).

Considerable quantities of French NFDM were exported to the Netherlands in 1969. This movement, like that of soft wheat, was aided by the weakness of the French franc, particularly on a forward basis. Dutch NFDM moved into intervention storage, while cheaper French NFDM moved into utilization.

West Germany has proposed to eliminate the milk surplus by imposing production quotas. Prices would be sharply reduced for any excess production over a farmer's allotment. Continued surpluses could force the EC to give serious consideration to this proposal.

Cost to the Guarantee Section of FEOGA for the dairy sector was expected to rise from about $640 million in 1968/69 to an estimated $1.2 billion in 1969/70--the sharpest jump for any commodity. The rise in cost for 1969/70 in this sector is due mainly to an increased use of subsidized NFDM in feeds as well as costs necessary to dispose of surplus butter.

Other Western Europe

Dairy surpluses also exist in Austria, Ireland, Sweden, and Finland. In general, programs to reduce dairy surpluses in these countries were essentially the same as those recently implemented in the EC. However, producers in Austri. Switzerland, and Finland have been made more responsible for oversupply by increased marketing fees when the production base has been exceeded.

In Switzerland, probably more than 28,000 cows were slaughtered in 1969 under a subsidy program--about $100 per cow--to reduce milk production. In Finland, more than 12,000 cows were subsidized for slaughter in the first half of 1969. Meanwhile, these countries have largely restricted higher levels of feeding to dairy cattle by limiting imports of feed ingredients, particularly protein concentrates.

Impact on U.S. Trade

Dairy surplus control measures may tend to have a negative impact on U.S. agricultural trade. Lower butter prices might result in a reduced demand for margarine which in turn may reduce vegetable oil requirements and soybean imports. NFDM used for feed will reduce protein requirements from other sources and possibly affect U.S. soybean meal exports to the EC. On the other hand, a significant expansion in commercial beef production would tend to counterbalance any negative impact by requiring increased imports of feed grains. EC exports of heavily subsidized dairy products to the United States have been curtailed by quotas, but efforts to find loopholes in U.S. import restrictions will no doubt continue.

MONETARY PROBLEMS IN THE EC

Monetary instability again moved into the forefront of Western Europe's economic problems in 1969. The French franc, which never fully recovered from the effects of the general strike and student demonstrations of May and June 1968, was devalued by 11.1 percent in August 1969. Then in October 1969, the German mark (DM), almost universally regarded as undervalued, was officially revalued by 9.3 percent (after nearly a month of defacto revaluation when its value was allowed to fluctuate).

Though these actions did much towards restoring stability to world monetary markets, they had serious implications for Community agricultural policy. Emergency measures were necessary to avoid disruption of the elaborately constructed common agricultural market.

Since the CAP sets common farm support prices for most major agricultural products in terms of units of account (equal to the U.S. dollar), a change in the exchange rate of any member state results in an immediate increase or decrease in that country's support prices in terms of the national currency. The August devaluation of the franc should have resulted in a 12.5-percent increase in French farm support prices (in terms of francs). Such price hikes, however, would have put intolerable inflationary pressure on the French economy and, in addition, would have encouraged French farmers to add to existing agricultural surpluses. Neither this situation nor the obvious alternative, the lowering of common support prices (or what would amount to the same thing, the devaluation of the unit of account), was deemed acceptable. Consequently, a compromise was reached whereby the Commission allowed France to retain pre-devaluation prices (in terms of francs), in effect isolating France from the rest of the Common Market.

Under this arrangement common support prices for France are suspended 2 years but are to be completely realigned in stages before the 1971/72 crop year. (However, France is not bound to maintain prices at the pre-devaluation level and has, in fact, raised prices for beef, veal, and skim milk.) To prevent this arrangement from giving France a trade advantage either within or outside the EC, a system of import subsidies and export taxes has been applied by France to grains, rice, milk and dairy products, beef, pork, sugar, rapeseed, sunflowerseed, eggs, poultry, and certain processed agricultural products.

This system is designed to offset the lower French support prices for these products (or their components) resulting from the devaluation. Fruits and vegetables, however, will not be subject to a tax or subsidy (except on the sugar content of processed fruits and vegetables) and support prices and minimum import prices for these products, where they exist, will be allowed to rise by the full extent of devaluation (12.5 percent in terms of francs). Also, the tax-subsidy system does not apply to products which were not at that time covered by the CAP--processed fruit and vegetables, wine, tobacco, and flax.

The effect of the suspension of common prices and the system of taxes and subsidies is to reduce the devaluation's impact on agricultural trade. France's competitive position in grains, sugar, dairy products and most other commodities covered by the CAP should remain essentially unchanged. But its competitive position automatically improved in fruits, vegetables, and other agricultural products not covered by the CAP. If French exporters maintain their sales price in terms of francs, their export prices in foreign currency will go down; conversely, import prices in terms of francs will go up.

An EC Commission report, published in December 1969, indicated that the tax-subsidy system was functioning reasonably well. Thus, it appears that the impact of devaluation on agricultural trade has been small. A more severe test of the CAP may take place in mid-1971 when French prices again align with those of the EC. Then the EC must face the problems deriving from higher French farm prices.

A much different arrangement was agreed upon to mitigate the effects of German revaluation. In contrast to the French situation, the DM revaluation would have meant an immediate drop in German support prices in terms of marks. These prices were, in fact, lowered by the full extent dictated by revaluation (8.5 percent in terms of deutsche marks) as of January 1, 1970. Immediately following revaluation, transitional emergency measures were put into effect. They included the freezing of Germany's support prices at the pre-revaluation level in terms of marks and the imposition of compensatory import taxes on most agricultural products covered by the CAP (as of October 27 compensatory export subsidies were also authorized). These temporary measures were discontinued on January 1, 1970.

German farmers are to be compensated for their income loss resulting from these price reductions however, by virtue of arrangements worked out by the EC Council and the German Government. They would receive $464 million per year from 1970 through 1974. Germany will receive $90 million from FEOGA in the first year and $60 million in the second year to help finance part of the income loss. These FEOGA funds would come from the export taxes applicable to French exports as a result of devaluation. In addition, the 5-percent tax on value added (TVA) for agricultural products in Germany was raised to 8 percent; for most German farmers this action will result in an increase in prices received since they will not be required to remit this tax increase to the government. (Large farms will not benefit from this measure to the same degree as small farms.) Annual revenues accruing to farmers as a result of this change in TVA are estimated at about $220 million. The remainder of the German farmers' income loss in 1970 (about $150 million) is to be covered by the Bonn Government through domestic funds.

Applied to agricultural trade, the arrangement allows revaluation to have its expected effects--that is, German imports will tend to be cheaper while exports will tend to be more expensive. However, the reduction of support prices, combined with income compensation payments, may help German farmers meet the competition of lower priced imports.

How revaluation affects future agricultural production is not yet clear. Much depends on the method and duration of compensation. The FEOGA payments are scheduled for 2 years while the increased TVA and the authorization of the German Government to grant compensation are scheduled for 4 years. However, it may be difficult to cut off these payments once established. Besides, the method of payment is not yet definite. A method of payment closely tied to production might stimulate production regardless of market conditions, complicating the EC's surplus problems.

The spillover of monetary problems into the agricultural sector brought out the difficulties inherent in the imbalances of the Community's progress toward economic union--in this case, the friction between the Common Agricultural Policy and divergent economic and monetary policies. The choice of income compensation as a solution to German revaluation probably minimized the damage to the CAP; an isolation of the German market similar to the French arrangement, which would have meant separate prices and import controls in the two largest members of the EC, would have made a sham of common agricultural prices. As it is, the CAP is shaken but essentially intact. The real test of the CAP may be the Community's ability to phase out these special adjustments. And this will depend largely on its ability to come to grips with its agricultural surplus.

EC STALLS ON AGRICULTURAL REFORM

The period following the Mansholt Plan proposals 7/ has been characterized by much debate over agricultural reform within the EC and very little results. For the most part, neither the structural reform proposals (aimed at reducing the farm labor force and at enlarging and rationalizing farm production units) nor the short-term proposals for price and market adjustments (aimed at stabilizing the Community's surplus-prone commodity markets) were acted upon. One exception was the adoption of slaughter and nonmarketing subsidies in the dairy sector.

Recent Commission Proposals on Surpluses

Alarmed at this continued inaction in the face of large and costly surpluses, the EC Commission introduced, on November 19, 1969, a revised and considerably less ambitious plan for agricultural reform and stabilization. Basically, the Commission's proposals aim at reducing the costs of the existing market support system while increasing expenditures for structural improvement. The Commission hopes to effect this re-orientation within a framework of

7/ The Agricultural Situation in Western Europe: Review of 1968 and Outlook for 1969, ERS-Foreign 258, March 31, 1969, pp. 13-16.

moderately increasing total FEOGA expenditure (a rate of increase attuned to growth of Community GNP was suggested).

To reduce support costs, the Commission has recommended cutting the support prices for soft wheat and butter and reducing the production quotas for sugar. A decrease of $2 per ton is proposed for the 1970/71 support price for soft wheat (and also rye). In addition, it is proposed that the present system of support prices be replaced by a system of identical support prices for all EC ports and that market support be limited to the last 4 months of the crop year. To reduce the costs of dairy support, the Commission would decrease the butter support price (by $31.25 per 100 kg.--half the amount proposed in the Mansholt Plan) and the price of butter sold from stock. The reduced butter support price will be offset, but only partially, by an increase in the support price for nonfat dry milk. In addition, the subsidy for the feeding of nonfat dry milk to calves is to be increased. In the sugar sector, besides the reduction of production quotas, an increase in the producer payment for the disposal of surpluses is proposed.

The November 19 proposals are still under discussion.

International Agreement Proposed for Fats and Oils

While not moving ahead on an earlier proposed consumption tax on fats and oils, the EC Commission shifted its strategy somewhat and presented guidelines for an international agreement on fats and oils. The original proposal (in the Mansholt Plan) called for a tax of $30 per ton on protein meal and of $60 per ton on various fats and oils. The U.S. Government warned that the proposed tax would constitute an impairment of the EC's GATT commitments and threatened immediate retaliation if it is adopted.

At the core of the guidelines is a proposed tax by developed countries on imports of all oilseeds, meals, cakes, fats and oils (with the significant exception of butter and olive oil). The tax would equal the difference between target prices and the various c.i.f. offer prices. It would be used to finance buffer stocks, make compensation payments to developing countries, and carry out a food aid program with surplus fats and oils products. In setting forth these guidelines, the Commission advanced as its primary goals the stabilization of world market prices for fats and oils and the augmentation of foreign exchange earnings of the developing countries. It is clear, however, that such an international agreement would achieve the objectives of the proposed consumption tax--namely, increasing the substitution of butter for margarine and of grains (particularly feed wheat) and nonfat dry milk for protein meals.

Another EC proposal under consideration provides for the expansion of existing authority to impose compensatory taxes on imports of oil bearing materials. In part, this would be done by the establishment of minimum import prices with the compensatory taxes applied when c.i.f. prices fall below those minimums.

Vedel Report

In September 1969, another ingredient injected into the agricultural reform controversy was the release of the "Vedel" report on French agriculture. This report, commissioned by the French Ministry of Agriculture, recommended a national program far more drastic than the Mansholt Plan. According to the Vedel report, the creation of larger farms operating with modern technology (the cornerstone of the Mansholt reform strategy) will not in itself solve farm surpluses. Consequently, this report calls for the massive withdrawal of land and labor resources from agriculture and a large reduction in the producer prices of cereals and sugar (based on average costs of Europe's most efficient producers). It recommends that France's agricultural area be reduced by more than one-third (an area twice that proposed by Mansholt for the entire EC) and that its labor force be reduced from 3 million to 600,000-700,000 by 1985. The impact of the Vedel report on French policy cannot be gauged at this time. While the strong opposition expressed by French farm organizations makes an open endorsement of the plan by French officials unlikely, the release of the report indicates increasing awareness of the seriousness of agricultural problems within the EC.

EC REACHES OPEN-ENDED AGRICULTURAL FINANCING AGREEMENT

On December 22, 1969, the EC Council of Ministers agreed on the framework for future financing of the CAP. This agreement enabled the Community to close out a 12-year transition period and move into its "final phase" as of January 1, 1970. It was widely regarded as the first concrete result of the new impetus given to European integration from The Hague Summit Conference of December 1-2. At the conference, attended by leaders of the member countries and by representatives of the EC Commission, it was agreed in principle to prepare for enlargement negotiations, to control agricultural surpluses and budget costs, and to move gradually toward an economic and monetary union. At French insistence, however, these advances were made contingent upon the completion of the financing arrangement before January 1. In apparently satisfying this requirement, the December 22 agreement enhanced the hope that the "spirit of The Hague" would enable the EC to break the deadlock that had inhibited its progress in many vital areas throughout 1969.

Unexpected difficulties prevented adoption of the final texts of the financing arrangement as planned at the January 19-20 meeting. However, after considerable modification and clarification of the agreement (including a compromise strictly limiting the power of the European Parliament to increase expenditures and agreement to reimpose the $285-million ceiling on expenditures for structural improvement as of January 1, 1972), these difficulties were resolved at the February 5-6 meeting of the Council. The agreement must still be ratified by the six national parliaments.

Details of the Agreement

The Community is scheduled to be completely self-financed (independent of direct member state contributions) by January 1, 1978. The transition to

complete self-financing will occur gradually over four time periods:

1970: Total FEOGA expenditure is to be financed according to the following scale:

	Percent
West Germany	31.7
France	28
Italy	21.5
Netherlands	10.35
Belgium	8.25
Luxembourg	0.2
Total	100.0

This financing is in contrast to that in recent years when national contribution (according to a somewhat different national scale) made up only the deficit between 90 percent of levy receipts and FEOGA expenditure.

1971-74: Variable levies, special charges (e.g., the sugar tax and possibly the proposed fats and oils tax), and customs duties at an increasing rate are to be made over by the members to the Community. To make up the deficits, member state contributions are to be apportioned as follows:

	Percent
West Germany	32.9
France	32.6
Italy	20.2
Netherlands	7.3
Belgium	6.8
Luxembourg	0.2
Total	100.0

Levies and special charges will be completely made over to the EC as of January 1, 1971. The amount of customs duties annually handed over to the Community by each member shall be equal to the difference between a "reference" amount and the levies collected on imports by that country. The "reference" amounts have been set as follows:

	Percent of member states combined levies and customs duties which must be contributed to FEOGA
1971	50
1972	62.5
1973	75
1974	87.5
1975	100

The annual variation in the percentage share of each member state's total contributions (levies, duties, and direct payment) to FEOGA may not be more than 1 percent above or 1.5 percent below the share of the previous year. The allocation scale for 1970 is to be used as the base year.

1975-77: The Community is to receive all agricultural levies, special charges, and customs duties (but will refund 10 percent to member states for administrative expenses) and, in addition, up to 1 percentage point of the standard tax on value added (TVA). During this period, the annual variation in the member state shares may not be more than 2 percent above the percentage share paid in the previous year. Any deficits resulting from this 2-percent limitation will be divided among the other member states according to their share of TVA going to the Community (but subject to the 2-percent limitation). Surplus funds would be carried forward to the next year.

January 1, 1978: The Community will be entirely financed from its own sources of revenue. Measures designed to maintain a certain balance among the contributions of the various member states during the transitional phases will no longer be applied.

The financial agreement as amended also provides that budgetary decisions covering 97 percent of the budget will remain with the Council but as of 1975 the European Parliament will have a consultative role and, under certain conditions, the power of amendment. Delegation of budgetary powers to the European Parliament is limited to that for administrative expenses, about 3 percent of the budget.

Consequences of the Agreement

The financing agreement tells us nothing about the future direction of the CAP. No decisions have been made on stabilization of the EC's agricultural markets and no ceiling has been placed on total FEOGA expenditures. It appears that agricultural surplus problems will be decided separately. Continuation of the ceiling on structural expenditures appears to rule out an agricultural reform plan of the dimensions envisaged by Mansholt and the EC Commission.

Agreement on financing before the development of a program for agricultural stabilization and reform may weaken the leverage of those calling for a drastic revision of the CAP. With the inequity of the cost burden reduced and with new, lucrative sources of revenue opening up to the Community, the financial base of the CAP should be considerably strengthened. The EC should be in a position to handle more rather than less expenditure on agriculture.

Italy likely will benefit most from the reshuffling of member state responsibility for the financing of FEOGA. Its share of total FEOGA expenditures will drop to 21.5 percent in 1970 from 26 percent in 1968/69. Shares paid by Belgium and the Netherlands in 1970 will drop slightly from their 1968/69 level. Germany's share of FEOGA will rise 1.7 percentage points to 31.7 percent while the French share will rise almost 3 percentage points to 28 percent. Nevertheless, France will remain the major recipient of FEOGA expenditures.

Considering the balance between benefits received from and payments made to FEOGA by the member states, the new arrangement reduces somewhat the inequity of the existing arrangement (except in the case of West Germany). This could reduce the critical posture of some member states, particularly Italy, regarding the CAP. On the other hand, Germany's stake in controlling CAP expenditures will not be diminished. In fact, the German (and Dutch) share of total FEOGA costs is expected to grow within the limits of the 1-percent or 2-percent rule.

EXPANSION OF THE EUROPEAN COMMUNITY

The Common Market has reached a point in its development where additional members or trade arrangements can have a significant impact on the world's political and economic structure. The United Kingdom, Ireland, Norway, and Denmark have submitted applications for membership in the Community, while numerous other countries have sought preferential trade arrangements.

United Kingdom, Ireland, Denmark, and Norway

The United Kingdom, Ireland, Denmark, and Norway formally applied for membership to the Community in 1967. France adamantly opposed opening negotiations with the United Kingdom (which took the lead in seeking membership) for agricultural and political reasons even though the other member countries were willing to negotiate. French opposition continued until early 1969 when Georges Pompidou became President of the French Republic. The former President, Charles De Gaulle, had prevented British entry into the EC because of its alleged association with the United States and Commonwealth countries. During the December 1969 summit meeting at The Hague, the member nations agreed to begin preliminary negotiations with the four applicants during 1970.

The agricultural base of the four applicant countries is small when compared to the present members. With enlargement, the EC would increase its agricultural area 30 percent, farm numbers by 20 percent, and agricultural labor force by 16 percent. The value of agricultural production of the four applicants is only 23 percent of that of the current EC members; however, the output per man-hour of the four applicants is greater. Denmark and the United Kingdom mainly account for this higher degree of productivity. Because of their small agricultural base in relation to population, the import base of the four applicants is large and the opportunity to expand intra-Community trade would be enhanced. The United Kingdom is the largest importer of agricultural products in the world British net agricultural imports exceed $5 billion; the collective net imports of current EC members total $6.7 billion.

The EC's agricultural policy is quite different from Britain's. The chief differences concern the method of income support and the type of control placed on imports. In the Community, producer income is keyed to high price supports on products protected from import competition by variable levies. In Britain, the market is freer, with domestically produced commodities selling at prices that are near the world levels. The U.K. payment system insures agricultural producers a guaranteed price for many major farm commodities. Within the Community, the cost of price support is paid by the consumer through higher market

prices. In Britain, the consumer pays lower prices and the taxpayer pays the difference between world and guaranteed prices.

If Britain joins, it will have to adapt its agricultural sector to Community policy. Applying a common agricultural policy will necessitate abolishing deficiency payments and introducing the EC's variable levy system. This will present problems. Food prices will increase as domestic prices rise and imports become more expensive. Britain's financial contributions to FEOGA will strain its monetary resources. In addition, the United Kingdom will have to consider Commonwealth preferences in negotiating entry into the EC.

The Community has stated its intention to consider Irish, Danish, and Norwegian membership along with that for the British. To align Irish producer prices with those of the Community would mean sharp rises in both producer and consumer prices for most products, while prices for sugar beets, potatoes and eggs likely would be reduced. Agriculture is crucial to the Irish economy since it accounts for 20 percent of the gross national product and employs 30 percent of the labor force. Approximately half of Ireland's exports are agricultural commodities. Like the Community, Ireland also has a structural problem with small farms.

Danes are among the world's most efficient farmers. Their agriculture contributes 10 percent of the gross national product and employs 9 percent of the labor force. Nearly two-thirds of Danish agricultural production is exported. Prices in Denmark are much lower than in the Community. Denmark's adaptation to the Community's levy system will mean abolishing certain support programs; raising feed grain and dairy prices; increasing food prices; and probably resulting in higher farm incomes, depending upon how membership raises farm costs.

Norwegian agriculture is characterized by unfavorable natural and structural conditions. Consequently, agricultural production requires high government subsidies. In general, producer prices in Norway are higher than those in the Community.

Turkey's Preparatory Period Extended

Associate Community membership was granted to Greece in 1962 and Turkey in 1964. Both countries enjoy preferential tariff rates on their chief agricultural exports to the Community. Before obtaining full membership in the Community, Turkey was to be in a "preparatory phase" through 1969 and enter into a "transitional phase" in 1970. However, at the end of 1969, negotiations for the transitional phase had not been completed so the Community decided to extend the original trading arrangements into 1970. Included in the arrangement is a 40-percent preference on citrus exports to the Community as well as reduced duties on imports of tobacco, certain dry fruit, and certain textile products. Greece's preparatory phase is not scheduled to end until 1984.

Trade Agreements

In June 1969, the Yaounde Convention was renewed. The members of this Convention are 18 African states who became associated with the Community according

to provisions of the 1957 Treaty of Rome. The first Convention of Association went into effect in June 1964 for a 5-year period. According to this agreement, members of the Yaounde Convention were given trade preferences on their tropical products. Meanwhile, the Community placed a common external tariff on tropical imports from third countries. Duties on some commodities imported from the 18 associated African states have been eliminated by the Community.

Renewal of the Arush Agreement came not long after that of the Yaounde Convention. This agreement linking the Community and the East African Community (Kenya, Uganda, and Tanzania) is scheduled to expire in January 1975.

The EC-Iran trade agreement has been renewed for another year. This agreement, in effect since December 1963, provides customs reductions for certain products.

Trade agreements were concluded in February 1970 with Israel and Yugoslavia and in March 1970 with Spain. The United Arab Republic is currently seeking a preferential trade agreement with the Community. Although some meetings were held with representatives of the EC and UAR, nothing definite has been concluded Austria, determined to remain politically neutral, has not sought membership in the EC. However, the Government and the Community are negotiating to eliminate present obstacles to reciprocal trade.

The EC's policy of granting preferential trade agreements with nonmember countries violates the General Agreement on Tariffs and Trade and the most-favored-nation policy. These preferences tend to hamper trade of other suppliers.

FIRST DECADE OF THE EUROPEAN FREE TRADE ASSOCIATION 8/

EFTA marked its 10th anniversary in January 1970. It was originally conceived as a flexible, temporary organization--a "second best" alternative to a wider European union. When the Treaty of Rome establishing the EC was signed in 1957, the "outer seven" were left in an uncomfortable position separate from the EC bloc. Led by the United Kingdom, they proposed an all-European free trade area. After this proposal was rejected by the Community countries at the end of 1958, the seven countries met in February 1959 and established a free trade area. Its nature is purely economic, unlike the all-embracing goals of the EC toward political as well as economic integration.

Trade between EFTA countries has expanded during the past decade. However in contrast to the EC, products of the agricultural sector do not benefit from the same free trade regime as manufactured goods. This is due to many factors--social as well as economic. Production patterns differ, and certain countries have a policy of maintaining a stipulated level of self-sufficiency in food products while protecting farmers from competitive imports. Denmark, one of EFTA's most efficient agricultural producing countries and an important produce of livestock products in Western Europe, has frequently complained that EFTA's

8/ For somewhat more detail, see "EFTA: Its First 10 Years and Its Alternatives for the Future," Marshall H. Cohen, January 26, 1970, U.S. Department of Agriculture, pp. 2-6.

exclusion of agricultural goods from tariff-free schedules was a form of discrimination.

The EFTA agreement, nevertheless, lists several categories of processed agricultural commodities and frozen and canned fish products as manufactured products; these items are freely traded. For example, quick frozen fish fillets--an important export by Norway and Iceland--enjoy duty-free status under a minimum export price agreement. This agreement paved the way for Icelandic membership in EFTA.

Agricultural trade between EFTA members has also benefited by special bilateral trade agreements permitted under the Stockholm Convention. Agricultural products included in these agreements are especially important to Denmark, a signatory to nearly all existing agreements. On a volume basis, the most important bilateral agreement is one under which the United Kingdom imports, duty free, about half its pork requirements and one-fifth of its butter requirements from Denmark. These commodities alone account for over half of all Danish agricultural exports. Portugal exports wine, duty free, under bilateral agreements with Switzerland and the Scandinavian countries.

One striking dissimilarity between EFTA and the EC is that the EFTA members retain their individual systems of agricultural policies. There is no all-embracing protectionist apparatus such as the Common Agricultural Policy. There are similar objectives for agriculture in EFTA, however, which apply to most member countries. They are: to attempt to raise agricultural income to the level of income in other sectors, to encourage price stability, and to improve agricultural efficiency by increasing farm size wherever possible. However, the policies employed to achieve agricultural goals are indeed diverse in EFTA due to economic, social, and, more importantly, geographic differences.

Programs to encourage structural improvement in agriculture are common in nearly all of the EFTA countries. There are still too many farmers, and average farm size is too small. For EFTA as a whole, the agricultural labor force is about 10 percent of the total labor force. However, the proportion varies from about 3 percent in the United Kingdom to about one-third in Finland and Portugal. Farms in EFTA average only about 30 acres (compared with about 350 acres in the United States). In the United Kingdom, farms are considerably larger, averaging about 75 acres. Farms average about 35 acres in Denmark and 12 acres in both Portugal and Norway.

EFTA, containing only about 3 percent of the world's population, or about 100 million, normally purchases 15 to 20 percent of global imports. This import demand reflects a high rate of industrial expansion in most EFTA countries.

The sharp increase in import demand also reflects rising per capita incomes in the EFTA countries. Sweden's per capita income--about $3,100 in 1968--is second only to the United States. Switzerland, at $2,700, ranks among the world's wealthiest countries, with Denmark ($2,400), and Norway ($2,300) not far behind. The United Kingdom approximates EFTA's average per capita income at around $2,000. Austria and Finland are both around $1,500, while Portugal's per capita income was slightly above $500 in 1968.

The doubling of intra-EFTA trade in the past decade largely was due to accelerated industrial production in many of the member countries. Manufactured goods accounted for about 75 percent of total intra-EFTA trade.

The United Kingdom and Denmark are of primary importance in the agricultural trade of EFTA. Since EFTA's inception, the U.K.'s share of EFTA's agricultural imports has been 60 percent. Denmark, the U.K.'s principal EFTA supplier, accounts for slightly more than 60 percent of the agricultural products exported by EFTA members.

Agricultural imports by EFTA countries from the United States amounted to $740 million in 1968, less than 10 percent of total agricultural imports. This relationship has not fluctuated notably since the birth of EFTA. The United States has been an important supplier of feeds, oilseeds and oilcake, tobacco, and processed foods to many of the EFTA countries. The United Kingdom accounts for nearly 60 percent of agricultural imports by EFTA members from the United States. Nearly half of EFTA's agricultural exports to the United States are from Denmark and consist largely of canned pork products.

On EFTA's tenth anniversary, its future is clouded by its uncertain relationship with the EC. Partly as a result, a preliminary treaty for a Nordic Common Market (Nordek) was signed in February 1970 between Norway, Finland, Sweden, and Denmark. Although the formation of Nordek will depend upon the outcome of negotiations between EFTA and the EC, the Nordic governments have agreed in principle upon a wide range of harmonization policies. Thus, whether the present polarity of markets continues in Western Europe will depend upon the outcome of talks between the EC and the United Kingdom, Denmark, and Norway currently scheduled to begin about mid-1970.

AGRICULTURAL IMPORTS STABILIZE BUT EXPORTS INCREASE

Economic activity in most West European countries recovered in 1968 from the slowdown in the preceding year. Economic expansion continued in 1969 and, as a result, the foreign trade of West European countries resumed its rapid uptrend. In 1968, total imports rose by nearly one-tenth over 1967 to a new high of $108 billion. Exports rose even faster--12 percent--to a record of nearly $100 billion.

Agricultural Imports

Western Europe's agricultural imports totaled $22 billion in 1968, almost equal to the 1967 level. Major agricultural imports continued to be fruit and vegetables; cereal and cereal preparations; meat and meat products; natural fibers; and coffee, tea, cocoa, and spices (table 4). The United Kingdom is the major country importing farm products in Western Europe--normally accounting for about one-fourth of total agricultural imports. The EC countries as a group account for well over half of the agricultural imports by West European countries. Within the EC, West Germany is the leading agricultural importer, followed by Italy and France.

The Community's agricultural imports (including intra-EC trade) in 1968 were valued at $13 billion, slightly above 1967 but close to the 1966 level. This leveling-off is the result of the EC's drive toward greater self-sufficiency in agricultural products, which has prompted a system of protective devices encouraging internal production and trade while minimizing imports from non-EC countries. Between 1966 and 1968, the Community's agricultural imports from non-EC members declined by $750 million, while intra-EC imports rose by nearly $1 billion.

Except for Portugal and Ireland, agricultural imports by non-EC countries during 1966-68 showed a downtrend. The United Kingdom imported $454 million (8 percent) less agricultural products in 1968 than in 1966. The devaluation of the pound sterling in 1967 and the introduction of a foreign exchange "saving policy" in 1968 no doubt contributed to smaller agricultural imports by the United Kingdom. Because of increased agricultural production, and the austerity measures which followed the devaluation of the peseta in 1967, Spain's imports of agricultural products in 1968 continued to decline and were $33 million (5 percent) less than in 1967.

Agricultural imports by West European countries decreased in both 1967 and 1968 but the more recent decline was slight. Comparing imports in 1968 with those in 1966, the decrease for grains and natural fibers was almost equal to the $760 million reduction in total agricultural imports by the countries in this area. During this period, Western Europe's imports of grains declined by a tenth or $318 million, while imports of natural fibers decreased $399 million, or one-sixth. The decrease in grain imports was largely due to increased domestic grain production by West European countries. The decrease in natural fiber imports reflects the shift toward greater use of manmade fibers as well as stagnation or even deterioration in the textile industries of many European countries. Western Europe's imports of other leading agricultural products such as fruit and vegetables, meat, dairy products, tobacco, and oilseeds changed little in recent years (table 4).

Imports from the United States

Western Europe's imports of U.S. farm products peaked at almost $3.1 billion in 1966, but declined to $2.6 billion in 1967 and $2.5 billion in 1968 (table 5). A further decline occurred in 1969 since U.S. agricultural exports to Western Europe during 1969 were down by $265 million from the 1968 level. A reduction in Western Europe's import requirements (through output expansion) and increased competition from other suppliers are the primary reason for the decline in imports of U.S. farm products in recent years.

Imports of grain from the United States in 1968--valued at $797 million--were only slightly below 1967 but $432 million less than in 1966. Although Western Europe's total imports of wheat and flour have continued at about $800 million, imports from the United States in both 1967 and 1968 were about one-third below the 1965-66 average. Western Europe's imports of feed grains have also declined due to increased production and the use of surplus soft wheat for feed. Imports of feed grains by West European countries in 1968 were $181 million less than in 1967. But imports of U.S. feed grains by West European

countries were only $10 million less in 1968. EC imports of U.S. grain in 1968 were higher than in 1967 but fell far short of the 1966 level. Spain and the United Kingdom imported less U.S. grain in both 1967 and 1968. Based on U.S. export data for 1969, over half of the decline in Western Europe's imports of U.S. farm products in 1969 apparently was in grains, particularly feed grains.

Fruit and vegetable imports from the United States have declined rapidly in recent years. Western Europe's imports of fruit and vegetables from the United States in 1968 were valued at $162 million--more than one-fifth below 1967 and close to one-third below 1966. The United States supplied only 4 percent of Western Europe's imports of fruit and vegetables in 1968. Increased competition from other suppliers has curtailed imports from the United States. Western Europe's advances in production technology, innovations in marketing, and restrictive trade policies have lessened import requirements of fruit and vegetables.

The U.S. share of West European cotton (unprocessed) imports in 1968--at 12 percent--was the lowest in recent years. Imports of U.S. cotton in 1968 were 17 percent less than in 1967 and apparently experienced a further sharp decrease in 1969. U.S. cotton exports to Western Europe during 1969 were about 40 percent of the level in 1968.

Western Europe continues to be a good market for our tobacco and oilseeds, mostly soybeans. In 1968, the United States supplied nearly half of the tobacco imports and more than half of the oilseed imports. More than one-fourth of protein cake and meal imports were from the United States. Exports of these commodities by the United States to Western Europe during 1969 showed little change from the preceding year.

Agricultural Exports

Western Europe is becoming an increasingly important exporter of agricultural products. These items account for a tenth of total exports. In 1968, agricultural exports amounted to $10.4 billion--almost 6 percent over 1967. Major agricultural exports are fruit and vegetables, meat and meat preparations, cereals and cereal preparations, and dairy products and eggs (table 6). France and the Netherlands are Western Europe's leading agricultural exporters, followed by Denmark and Italy.

Much of the increase in Western Europe's exports of agricultural products is attributable to larger exports of livestock and animal products and grains. Exports of live animals, meat and meat preparations, and dairy products and eggs by Western Europe amounted to $3.5 billion in 1968, 6 percent over 1967. These products accounted for one-third of total agricultural exports. Exports of grains amounted to $1.4 billion in 1968, compared with $1.2 billion in 1967. Wheat accounts for about half of the grain exports. The Community is the leading grain exporter in Western Europe with export sales in 1968 amounting to $1.1 billion, 13 percent larger than in 1967. France, the leading grain exporter, accounted for most of the increase in grain exports. Slightly more than one-half of the Community's grain export trade was with other members in 1968.

Economic Situation

Economic expansion is expected to remain at a high level in Western Europe throughout 1970. Domestic demand will continue to expand, but growth in exports may decline. Rising prices and costs must be contained in a number of countries to avoid strong inflationary pressures.

The European Community will continue to spearhead Western Europe's economic expansion. West Germany's economy is expected to perform well in 1970 with revaluation of the deutsche mark exerting a pulling force on agricultural imports. Italy may lead EC members in terms of real growth--possible over 7 percent--depending upon political stability. France will continue to stabilize its economy in readiness for more rapid economic growth. The Netherlands will probably continue to ride the crest of an economic boom which began in 1968, but there is considerable danger of an inflationary outbreak. Belgium should enjoy excellent economic conditions in 1970 with a real growth rate of 5 percent.

The United Kingdom showed significant improvement in its balance of payments in 1969 and ended the year with a trade surplus. Some further improvement is expected this year as exports continue to outpace imports. Maintaining this improvement will require continued use of financial and economic restrictions within the United Kingdom which will continue to keep inhibiting real economic growth.

Spain, Portugal, Greece, and Austria should experience solid economic gains throughout 1970. Spain, possibly in the midst of a new expansionary phase, will need to avoid excessive demand pressures. Portugal should continue to improve from an economic slowdown which began in 1966. Greece's economic growth is expected to continue, but at a slightly lower rate than in 1969. Austria expects a continuation of vigorous economic growth in 1970.

Scandinavia should experience generally good economic conditions in 1970. In both Denmark and Sweden, economic activity has been rising strongly since late 1968. However, some decline in economic activity is expected in Sweden in late 1970.

Crop Production and Trade

Prospects for 1970 crop production and trade in Western Europe are uncertain at this time. This is due to the limited data available on the status of fall-sown crops, the almost complete lack of information on farmers' intended spring plantings, and the year-to-year fluctuation in weather conditions. Thus, observations can only be of a general nature.

One development which may affect the mix of grain production in Western Europe in 1970 is an apparent tendency of farmers to switch from soft wheat to feed grain production. In the EC, wheat area declined 75,000 hectares from 1968 to 1969 while the corn and barley area increased by 250,000 hectares (oat area continued its long-term decline). In addition, the EC is encouraging the

production of durum wheat which has a lower yield than soft wheat. Greece, Spain, and Austria are also encouraging substitution of barley and corn for wheat. On the other hand, the fall seeding of wheat in the United Kingdom was at a record level and, combined with spring wheat plantings, may result in a record wheat crop in 1970. Denmark's winter seeding of wheat also increased.

Imports of durum and hard wheats by Western Europe in 1970 are expected to remain about equal to those in recent years. Declines in per capita consumption of wheat are just about offset by population growth. However, some increases are being achieved in indigenous durum and hard wheat production. U.S. wheat exports to Western Europe currently appear to be benefiting from an improved price relationship with competing wheat and from reduced competitive supplies of hard wheat.

Prospects for Western Europe's imports of feed grains in 1970 are not bright for the United States. Feed grain production in Western Europe was a record in 1969 and large quantities of soft wheat are being diverted into feed use. In addition, the use of low-cost grain substitutes (corn gluten, brewers grains, manioc) is displacing feed grains. Finally, U.S. exports of feed grains--primarily corn--to Western Europe may face increased competition from other suppliers in 1970.

The outlook for Western Europe's imports of oilseeds and oil cake and meal appears quite favorable for suppliers. This is particularly true for U.S. exports of soybeans and soybean cake and meal. Prospects for the United States look particularly good in Italy, Spain, Denmark, and Austria.

Domestic production of oilseeds in Western Europe accounts for only a small part of total consumption and no significant change is anticipated in 1970. Some expansion in livestock and poultry production will increase the demand for protein feed. However, the EC may channel larger amounts of nonfat dry milk into feed use. This would tend to dampen imports of protein feed.

Cotton requirements by Western Europe in 1970 will likely remain at about last year's level. Although Italy and Finland are expected to show an increased import demand, the use of cotton will continue to be restricted by competition with manmade fibers. U.S. exports of cotton to Western Europe declined sharply in 1969 but current reports indicate a probable modest improvement in 1970.

The EC's recent agreement on a CAP for raw tobacco could lead to increased production of tobacco in several member countries of the EC and in associate members--Greece and Turkey. Taxing policies to be carried out under the tobacco CAP may discriminate against U.S. quality leaf. However, it is too early to assess the full implications of the tobacco CAP.

Livestock-Poultry Production and Trade

Production of beef and veal in Western Europe may expand moderately in 1970. Output this year is likely to increase in the United Kingdom, West Germany, Belgium, Netherlands, Austria, and Greece. The EC's cow slaughter program during the first quarter of 1970 will boost beef production in that area. Cattle numbers in the United Kingdom have recovered sufficiently to more than

wipe out losses caused by the foot-and-mouth epidemic in 1967-68. Countries which likely had reduced cattle numbers at the beginning of 1970 compared with a year earlier included France, Denmark, and Norway. Reduced forage supplies in Denmark may result in a further decline in cattle numbers in 1970.

Western Europe this year will remain a major importer of beef. There should be a good foreign market for U.S. variety meats and specialty products as Western Europe's output of meat continues to lag behind consumption. U.S. exports of hides and skins, as well as tallow, to the area may increase.

Pork production should increase in Western Europe this year from a cyclical downturn in 1969. Major increases in pork output are expected in Austria, Belgium, Denmark, the Netherlands, France, and Italy. Lesser increases are likely for West Germany, Spain, Greece, Norway, and Finland. Pork production in the United Kingdom may decline with Denmark continuing as the major outside supplier.

Poultry production continues to expand in Western Europe. Much of the expansion is confined to broiler production, with egg output tending to stabilize. The entry of the U.S.S.R. (and possibly Eastern Europe) into the West European market as a buyer of poultry meat will give added strength to broiler output in 1970. Broiler production is expected to show a strong increase in the Netherlands and the United Kingdom. Production in Denmark is forecast to be 69,000 tons, about the same as in 1969. Reduced retail prices in Denmark, resulting largely from a sharp decline in the regulated wholesale price for poultry meat, may increase domestic consumption by 15-20 percent and curtail exportable production.

U.S. poultry exports to Western Europe will continue to face the EC's variable levy system in 1970 as well as keen competition from the Continent. In addition, Denmark and the Netherlands will continue to compete with the United States in other global markets.

Milk production in Western Europe increased only slightly in 1969. There is a good possibility that 1970 production may stabilize around last year's level. The dairy programs being carried out in the EC will curtail milk production to some degree. Dairy cow numbers are down about 3 percent in Austria and the United Kingdom. Denmark and Sweden are experiencing a decrease in cow numbers. Some decline in cow numbers is also expected for France. Higher yields as well as increased cow numbers in some countries (e.g., the Netherlands) will at least partly offset the effects of reduced numbers elsewhere.

APPENDIX TABLES

Table 2.--Western Europe: Production and area of

Country and year	Grains													
	Production								Area					
	Wheat	Rye	Feed grains				Rice	Total grains	Wheat	Rye	Feed grains			
			Barley	Oats	Corn	Total 2/					Barley	Oats	Corn	Total 2/
	1,000 tons								1,000 hectares					
Belgium-Luxembourg:														
1960-64	842	144	478	455	2	976	---	1,962	226	49	131	140	1	285
1966	689	81	523	324	3	893	---	1,663	230	33	173	105	1	292
1967	877	100	669	406	3	1,138	---	2,115	214	31	166	111	1	294
1968	880	92	622	348	3	1,031	---	2,003	218	29	168	101	1	286
1969	797	76	609	317	4	993	---	1,866	212	24	171	98	1	288
France:														
1960-64	11,746	373	6,261	2,628	2,624	11,873	121	24,113	4,233	251	2,284	1,321	902	4,708
1966	11,297	357	7,421	2,578	4,331	14,980	100	26,734	3,992	198	2,642	1,094	961	4,972
1967	14,288	344	9,874	2,821	4,139	17,595	115	32,342	3,929	175	2,818	1,040	1,013	5,172
1968	14,985	327	9,139	2,528	5,379	17,835	83	33,230	4,090	163	2,781	949	1,022	5,032
1969	14,535	319	9,347	2,349	5,639	18,105	104	33,063	4,046	158	2,847	869	1,178	5,160
West Germany:														
1960-64	4,731	3,225	3,433	2,211	39	7,076	---	15,032	1,388	1,176	1,107	762	12	2,363
1966	4,533	2,696	3,869	2,340	127	7,595	---	14,824	1,389	1,021	1,288	777	31	2,529
1967	5,819	3,162	4,734	2,718	197	9,045	---	18,026	1,414	975	1,308	808	42	2,583
1968	6,198	3,189	4,974	2,893	287	9,681	---	19,068	1,464	962	1,330	821	58	2,659
1969	6,000	2,889	5,130	2,976	400	10,041	---	18,930	1,494	873	1,387	860	81	2,784
Italy:														
1960-64	8,261	89	266	525	3,732	4,536	635	13,521	4,451	59	209	406	1,140	1,761
1966	9,400	83	253	477	3,510	4,262	621	14,366	4,274	46	179	359	987	1,531
1967	9,596	82	295	556	3,860	4,731	756	15,165	4,012	46	181	357	1,017	1,561
1968	9,590	75	258	390	3,988	4,655	639	14,959	4,275	42	175	323	967	1,471
1969	9,540	71	292	491	4,439	5,242	852	15,705	4,218	38	175	312	979	1,471
Netherlands:														
1960-64	583	354	374	425	---	946	---	1,883	132	118	92	116	---	252
1966	597	190	416	357	---	834	---	1,621	148	74	120	99	---	240
1967	739	239	447	365	---	862	---	1,840	154	73	107	88	---	209
1968	679	239	389	318	---	735	---	1,653	153	75	107	76	---	192
1969	699	197	405	336	---	762	---	1,658	155	62	99	82	---	187
Total EC:														
1960-64	26,163	4,185	10,812	6,244	6,397	25,407	756	56,511	10,430	1,653	3,823	2,745	2,055	9,369
1966	26,516	3,407	12,482	6,076	7,971	28,564	721	59,208	10,033	1,372	4,402	2,434	1,980	9,564
1967	31,319	3,927	16,019	6,866	8,199	33,371	871	69,488	9,723	1,300	4,580	2,404	2,073	9,819
1968	32,332	3,922	15,382	6,477	9,657	33,937	722	70,913	10,200	1,271	4,561	2,270	2,048	9,640
1969	31,571	3,552	15,783	6,469	10,482	35,143	956	71,222	10,125	1,155	4,679	2,221	2,239	9,890
Austria:														
1960-64	712	401	576	336	202	1,167	---	2,280	276	183	209	152	53	437
1966	897	363	706	325	275	1,389	---	2,649	314	144	230	126	55	443
1967	1,045	377	772	336	316	1,514	---	2,936	316	139	232	124	60	448
1968	1,045	413	770	324	399	1,589	---	3,047	306	142	238	119	74	464
1969	950	440	935	288	698	2,017	---	3,407	287	147	274	102	117	524
Denmark:														
1960-64	487	418	3,241	693	---	4,631	---	5,536	121	145	855	191	---	1,267
1966	400	136	4,159	864	---	5,424	---	5,960	94	46	1,112	234	---	1,465
1967	421	118	4,382	904	---	5,614	---	6,153	91	37	1,170	243	---	1,510
1968	464	131	5,047	863	---	6,189	---	6,784	96	39	1,254	218	---	1,550
1969	429	126	5,255	765	---	6,220	---	6,775	98	39	1,304	204	---	1,566
Finland:														
1960-64	422	140	387	846	---	1,281	---	1,843	242	93	227	467	---	723
1966	369	119	597	881	---	1,530	---	2,018	208	93	321	479	---	830
1967	507	163	681	940	---	1,681	---	2,351	252	96	346	455	---	832
1968	716	134	774	1,064	---	1,889	---	2,739	241	72	359	489	---	879
1969	515	140	842	1,146	---	2,049	---	2,704	227	74	402	524	---	956

See footnotes at end of table.

selected crops, average 1960-64, annual 1966-69 1/

Grains--Cont.		Other crops											
Area--Continued		Production								Area			
Rice	Total grains	Potatoes	Sugar-beets	Cotton	Tobacco	Olive oil	Fruit 3/			Potatoes	Sugar-beets	Cotton	Tobacco
							Apples	Pears	Citrus				
1,000 hectares		1,000 tons								1,000 hectares			
---	560	1,870	2,607	---	3	---	160	59	---	75	61	---	1
---	555	1,543	2,558	---	2	---	215	31	---	63	67	---	1
---	539	2,034	3,615	---	2	---	300	51	---	65	78	---	1
---	533	1,625	4,108	---	2	---	186	84	---	58	90	---	1
---	524	1,528	4,220	---	2	---	312	61	---	53	90	---	1
31	9,223	13,915	14,803	---	41	1	854	302	---	825	387	---	22
28	9,190	10,604	12,889	---	47	1	1,378	331	---	536	295	---	21
27	9,303	10,391	12,769	---	48	1	1,550	362	---	514	314	---	20
25	9,310	10,033	17,557	---	52	1	1,843	446	---	469	404	---	20
23	9,387	8,811	17,525	---	48	1	1,785	404	---	424	399	---	20
---	4,927	23,515	11,292	---	10	---	1,623	477	---	951	294	---	4
---	4,939	18,839	12,508	---	9	---	1,473	351	---	732	292	---	3
---	4,972	21,294	13,689	---	9	---	2,274	405	---	707	294	---	4
---	5,085	19,196	13,633	---	7	---	1,570	611	---	659	290	---	4
---	5,151	15,985	12,563	---	8	---	2,489	369	---	589	295	---	3
121	6,392	3,904	7,543	5	59	385	2,180	866	1,475	375	232	19	48
132	5,983	3,860	11,259	3	73	320	2,289	1,590	1,973	347	298	11	54
144	5,763	4,010	13,507	3	87	537	1,932	1,317	2,095	339	345	9	54
156	5,944	3,960	11,457	2	74	385	1,923	1,369	2,465	319	306	7	52
173	5,900	3,845	10,010	2	76	390	1,769	1,440	2,405	320	300	6	47
---	502	3,766	3,606	---	---	---	335	120	---	124	78	---	---
---	462	4,124	3,645	---	---	---	345	116	---	131	92	---	---
---	436	4,840	5,074	---	---	---	488	72	---	138	100	---	---
---	420	5,045	5,128	---	---	---	340	180	---	147	104	---	---
---	404	4,607	5,000	---	---	---	500	95	---	145	103	---	---
152	21,604	46,970	39,851	5	113	386	5,152	1,824	1,475	2,350	1,052	19	75
160	21,129	38,970	42,859	3	131	321	5,700	2,419	1,973	1,809	1,044	11	79
171	21,013	42,569	48,654	3	146	538	6,544	2,207	2,095	1,753	1,131	9	79
181	21,292	39,859	51,883	2	135	386	5,862	2,690	2,465	1,652	1,194	7	77
196	21,366	34,776	49,318	2	134	391	6,855	2,369	2,405	1,531	1,187	6	71
---	896	3,471	1,799	---	1	---	279	69	---	168	47	---	4/
---	901	3,007	2,308	---	1	---	227	52	---	137	47	---	4/
---	903	3,049	2,006	---	1	---	246	54	---	134	42	---	4/
---	912	3,473	1,936	---	1	---	217	56	---	130	44	---	4/
---	958	2,941	2,011	---	1	---	230	52	---	113	46	---	4/
---	1,533	1,432	2,164	---	---	---	5/84	5/8	---	69	58	---	---
---	1,605	972	2,159	---	---	---	5/77	5/7	---	40	58	---	---
---	1,638	857	2,210	---	---	---	5/85	5/8	---	38	53	---	---
---	1,685	863	2,330	---	---	---	5/84	5/9	---	35	52	---	---
---	1,703	592	1,960	---	---	---	5/83	5/8	---	33	52	---	---
---	1,058	1,159	424	---	---	---	---	---	---	77	18	---	---
---	1,131	1,066	457	---	---	---	---	---	---	68	17	---	---
---	1,180	881	432	---	---	---	---	---	---	64	18	---	---
---	1,192	908	386	---	---	---	---	---	---	64	15	---	---
---	1,257	977	278	---	---	---	---	---	---	67	14	---	---

--Continued

Table 2.--Western Europe: Production and area of selected

Country and year	Grains													
	Production								Area					
	Wheat	Rye	Feed grains				Rice	Total grains	Wheat	Rye	Feed grains			
			Barley	Oats	Corn	Total 2/					Barley	Oats	Corn	Total 2/
	1,000 tons								1,000 hectares					
Greece:														
1960-64	1,722	24	248	150	284	693	80	2,519	1,089	23	184	126	187	509
1966	1,962	15	632	174	320	1,131	86	3,194	1,018	13	321	122	142	591
1967	1,848	14	839	165	339	1,348	91	3,301	937	11	390	113	132	640
1968	1,515	9	487	105	375	970	108	2,602	1,027	10	352	104	137	598
1969	1,751	8	529	119	421	1,071	103	2,933	1,010	8	310	95	144	553
Ireland:														
1960-64	351	2	502	366	---	868	---	1,221	119	1	160	142	---	302
1966	168	1	610	290	---	900	---	1,069	53	1	187	98	---	285
1967	255	1	629	285	---	914	---	1,170	76	1	183	96	---	279
1968	368	1	689	273	---	962	---	1,331	90	4/	184	88	---	272
1969	325	1	750	230	---	980	---	1,306	81	4/	198	76	---	274
Norway:														
1960-64	22	3	423	139	---	566	---	591	9	1	165	55	---	221
1966	4	1	405	92	---	499	---	504	2	1	188	41	---	230
1967	11	2	486	123	---	611	---	624	3	1	179	45	---	225
1968	16	4	621	176	---	800	---	820	5	1	176	50	---	227
1969	7	5	454	114	---	570	---	582	3	2	182	46	---	229
Portugal:														
1960-64	526	162	56	79	562	699	170	1,557	710	302	123	279	489	892
1966	312	145	49	63	565	679	154	1,290	523	282	111	218	473	803
1967	637	175	73	111	577	763	146	1,721	586	239	107	226	436	770
1968	747	199	94	129	548	773	149	1,868	614	239	135	224	438	798
1969	382	164	57	94	550	703	174	1,423	540	217	131	215	417	764
Spain:														
1960-64	4,120	393	1,893	459	1,075	3,456	397	8,366	4,148	465	1,431	545	461	2,452
1966	4,876	353	2,006	442	1,154	3,655	375	9,259	4,185	384	1,338	469	482	2,327
1967	5,650	336	2,576	492	1,195	4,328	366	10,680	4,269	400	1,525	491	484	2,547
1968	5,477	364	3,708	522	1,440	5,743	363	11,947	3,950	371	2,047	512	523	3,135
1969	4,691	348	3,855	533	1,577	6,048	404	11,491	3,744	333	2,164	498	525	3,247
Sweden:														
1960-64	866	154	1,050	1,272	---	2,812	---	3,832	276	65	378	502	---	1,073
1966	576	85	1,408	1,154	---	2,828	---	3,489	191	39	568	461	---	1,145
1967	1,130	198	1,564	1,396	---	3,219	---	4,547	254	61	530	455	---	1,080
1968	1,059	210	1,776	1,523	---	3,554	---	4,823	245	68	553	464	---	1,103
1969	919	179	1,530	1,096	---	2,796	---	3,894	265	70	570	456	---	1,100
Switzerland:														
1960-64	343	52	99	43	11	191	---	586	104	15	30	13	2	58
1966	328	46	107	33	19	193	---	567	102	13	32	10	4	56
1967	401	63	117	32	22	210	---	674	99	15	31	9	4	55
1968	383	64	111	30	24	204	---	651	99	16	30	8	4	53
1969	368	54	135	34	40	247	---	669	97	15	39	10	7	67
United Kingdom:														
1960-64	3,293	20	5,891	1,705	---	7,752	---	11,065	835	8	1,694	619	---	2,366
1966	3,475	11	8,723	1,120	---	9,937	---	13,423	906	4	2,481	367	---	2,878
1967	3,902	12	9,214	1,386	---	10,719	---	14,633	933	4	2,439	410	---	2,885
1968	3,469	11	8,270	1,225	---	9,648	---	13,128	978	4	2,401	382	---	2,828
1969	3,353	9	8,788	1,350	---	10,351	---	13,713	833	3	2,427	383	---	2,873
Total W. Europe:														
1960-64	39,027	5,955	25,178	12,330	8,533	49,531	1,403	95,916	18,359	2,954	9,279	5,836	3,247	19,669
1966	39,883	4,682	31,884	11,514	10,304	56,729	1,336	102,630	17,629	2,392	11,291	5,059	3,136	20,617
1967	47,126	5,386	37,352	13,036	10,648	64,292	1,474	118,278	17,539	2,304	11,712	5,071	3,189	21,090
1968	47,591	5,462	37,729	12,711	12,443	66,258	1,342	120,653	17,851	2,233	12,290	4,928	3,224	21,547
1969	45,261	5,026	38,913	12,238	13,768	68,195	1,637	120,119	17,310	2,063	12,680	4,830	3,449	22,043

1/ Preliminary.
2/ Includes other grains.
3/ Data for apples and pears include those for dessert and cooking only; fruit totals exclude Portugal.
4/ Less than 500.
5/ Commercial crop.

crops, average 1960-64, annual 1966-69 1/--Continued

Grains--Cont.		Other crops											
Area--Continued		Production								Area			
Rice	Total grains	Potatoes	Sugar-beets	Cotton	Tobacco	Olive oil	Fruit 3/			Potatoes	Sugar-beets	Cotton	Tobacco
							Apples	Pears	Citrus				
1,000 hectares		1,000 tons								1,000 hectares			
20	1,641	527	223	82	99	144	130	41	329	44	7	193	122
17	1,639	579	831	88	98	180	166	55	360	48	16	140	129
18	1,606	721	899	96	114	194	178	69	304	51	16	137	126
21	1,656	620	663	73	88	154	192	91	424	47	18	138	108
20	1,591	671	1,150	107	81	155	194	83	568	48	23	152	108
---	422	1,935	924	---	---	---	---	---	---	85	32	---	---
---	339	1,678	704	---	---	---	---	---	---	68	22	---	---
---	356	1,748	956	---	---	---	---	---	---	64	26	---	---
---	362	1,624	1,093	---	---	---	---	---	---	59	26	---	---
---	355	1,485	922	---	---	---	---	---	---	55	25	---	---
---	231	1,082	---	---	---	---	62	9	---	52	---	---	---
---	233	1,090	---	---	---	---	41	9	---	45	---	---	---
---	229	807	---	---	---	---	39	5	---	40	---	---	---
---	233	912	---	---	---	---	52	10	---	35	---	---	---
---	234	773	---	---	---	---	64	14	---	32	---	---	---
37	1,941	1,056	---	---	---	79	n.a.	n.a.	n.a.	104	---	---	---
35	1,643	923	---	---	---	38	n.a.	n.a.	n.a.	101	---	---	---
32	1,627	1,296	---	---	---	81	n.a.	n.a.	n.a.	117	---	---	---
33	1,684	1,083	---	---	---	53	n.a.	n.a.	n.a.	105	---	---	---
37	1,558	1,079	---	---	---	62	n.a.	n.a.	n.a.	95	---	---	---
63	7,128	4,604	3,532	92	31	378	290	132	1,799	399	146	275	19
59	6,955	4,423	4,042	90	21	437	392	178	2,468	375	148	234	12
60	7,276	4,508	4,282	65	31	273	308	119	2,211	380	162	144	17
63	7,519	4,431	4,338	77	21	444	428	218	1,839	375	170	136	14
66	7,390	4,717	5,079	67	25	370	397	192	2,222	386	194	138	14
---	1,414	1,636	1,832	---	---	---	123	14	---	93	46	---	---
---	1,375	1,355	1,434	---	---	---	110	11	---	55	41	---	---
---	1,395	1,399	1,798	---	---	---	131	16	---	55	41	---	---
---	1,416	1,424	1,988	---	---	---	125	17	---	55	41	---	---
---	1,435	849	1,573	---	---	---	100	10	---	49	40	---	---
---	177	1,222	256	---	2	---	194	38	---	49	6	---	1
---	171	1,049	366	---	2	---	89	18	---	39	8	---	1
---	169	1,310	423	---	2	---	104	16	---	38	9	---	1
---	168	1,270	453	---	2	---	91	28	---	37	9	---	1
---	179	1,210	392	---	2	---	126	19	---	34	9	---	1
---	3,209	6,829	6,083	---	---	---	518	62	---	309	174	---	---
---	3,788	6,580	6,599	---	---	---	442	43	---	271	180	---	---
---	3,822	7,201	6,884	---	---	---	285	24	---	287	185	---	---
---	3,810	6,858	7,118	---	---	---	326	77	---	280	188	---	---
---	3,709	6,160	6,650	---	---	---	397	60	---	249	185	---	---
272	41,254	71,923	57,088	179	246	987	6,832	2,197	3,603	3,799	1,586	487	217
271	40,909	61,692	61,759	181	253	976	7,244	2,792	4,801	3,056	1,581	385	221
281	41,214	66,346	68,544	164	294	1,086	7,920	2,518	4,610	3,021	1,683	290	223
298	41,929	63,325	72,188	152	247	1,037	7,377	3,196	4,728	2,874	1,757	281	200
319	41,735	56,230	69,333	176	243	978	8,446	2,807	5,195	2,692	1,775	296	194

n.a. = Not available.

Table 3.--Western Europe: Production of principal livestock products, average 1960-64, annual 1966-69 1/

Country and year	Beef and veal	Mutton, lamb, and goatmeat	Pork 2/	Total red meat 3/	Poultry meat 4/	Cow's milk	Eggs
	1,000 tons						
Belgium-Luxembourg:							
1960-64	221	2	246	495	77	4,120	173
1966	231	2	292	545	99	4,211	172
1967	243	3	319	584	101	4,272	180
1968	247	3	350	618	91	4,421	202
1969	258	7	347	629	88	4,210	188
France:							
1960-64	1,439	108	953	2,752	372	24,338	527
1966	1,489	117	1,186	3,095	488	28,016	557
1967	1,607	118	1,240	3,282	512	29,355	592
1968	1,668	116	1,215	3,333	544	30,385	620
1969	1,585	110	1,106	3,156	560	30,076	638
West Germany:							
1960-64	1,138	14	2,051	3,242	117	20,190	530
1966	1,194	13	2,232	3,476	176	21,357	735
1967	1,194	12	2,315	3,555	204	21,717	787
1968	1,240	10	2,541	3,822	210	22,121	804
1969	1,290	11	2,470	3,800	230	22,110	826
Italy:							
1960-64	621	37	414	1,161	234	9,413	396
1966	673	41	427	1,232	388	10,159	505
1967	712	41	458	1,302	375	9,800	517
1968	784	42	539	1,456	410	9,300	502
1969	800	43	525	1,459	425	9,350	478
Netherlands:							
1960-64	272	8	426	718	97	7,005	334
1966	281	9	521	817	188	7,235	245
1967	275	9	529	818	213	7,535	216
1968	285	8	593	892	227	7,719	232
1969	287	10	593	895	260	7,889	265
Total EC:							
1960-64	3,691	169	4,090	8,368	897	65,066	1,960
1966	3,868	182	4,658	9,165	1,339	70,978	2,214
1967	4,031	183	4,861	9,541	1,405	72,679	2,292
1968	4,224	179	5,238	10,121	1,482	73,946	2,360
1969	4,220	181	5,041	9,939	1,563	73,635	2,395
Austria:							
1960-64	137	1	240	384	26	2,985	80
1966	148	1	244	395	39	3,216	78
1967	157	1	251	411	40	3,360	80
1968	157	1	261	421	42	3,357	82
1969	154	1	270	427	46	3,320	83
Denmark:							
1960-64	162	1	633	798	64	5,319	117
1966	192	2	728	925	68	5,309	90
1967	216	3	734	955	66	5,193	89
1968	211	3	714	930	65	5,127	86
1969	190	2	670	864	69	4,870	89
Finland:							
1960-64	84	1	63	153	2	3,668	45
1966	85	1	73	165	2	3,689	54
1967	91	1	91	188	2	3,456	57
1968	88	1	86	180	3	3,491	54
1969	102	1	89	197	3	3,576	56

--Continue

Table 3.--Western Europe: Production of principal livestock products, average 1960-64, annual 1966-69 1/--Continued

Country and year	Beef and veal	Mutton, lamb, and goatmeat	Pork 2/	Total red meat 3/	Poultry meat 4/	Cow's milk	Eggs
	1,000 tons						
Greece:							
1960-64	40	77	37	156	22	385	67
1966	68	85	41	196	41	529	87
1967	72	86	42	202	46	564	93
1968	75	86	43	206	51	562	104
1969	77	86	44	207	57	562	105
Ireland:							
1960-64	126	44	111	280	19	2,842	45
1966	135	48	126	309	25	3,232	46
1967	223	45	109	382	25	3,471	43
1968	193	44	123	364	27	3,671	41
1969	198	41	140	383	28	3,675	40
Norway:							
1960-64	54	15	55	127	3	1,648	32
1966	57	17	57	134	4	1,732	37
1967	54	18	58	133	4	1,762	38
1968	53	18	62	136	5	1,832	37
1969	57	17	67	143	5	1,807	39
Portugal:							
1960-64	45	22	91	161	30	354	32
1966	64	22	90	177	43	368	34
1967	52	21	72	147	44	397	34
1968	61	25	98	186	46	420	35
1969	80	27	105	213	50	450	40
Spain:							
1960-64	180	119	286	604	95	2,255	248
1966	198	133	376	724	212	2,726	311
1967	215	134	423	788	257	3,014	319
1968	241	131	425	812	256	3,196	328
1969	254	129	437	835	285	3,505	342
Sweden:							
1960-64	149	2	212	371	18	3,905	95
1966	173	2	221	404	22	3,545	93
1967	167	2	227	402	25	3,320	92
1968	157	3	237	402	30	3,310	99
1969	168	4	226	403	33	3,230	98
Switzerland:							
1960-64	108	3	139	251	7	3,079	29
1966	112	3	158	276	14	3,153	36
1967	119	3	167	292	14	3,274	37
1968	127	3	189	321	15	3,322	37
1969	122	3	193	320	16	3,182	37
United Kingdom:							
1960-64	893	250	762	1,905	350	5/11,100	815
1966	867	270	895	2,032	442	5/11,296	860
1967	921	262	823	2,006	482	5/11,696	887
1968	904	244	859	2,007	526	5/12,009	901
1969	870	207	923	2,000	550	5/12,169	910
Total W. Europe:							
1960-64	5,669	704	6,719	13,558	1,533	102,606	3,565
1966	5,967	766	7,667	14,902	2,251	109,773	3,940
1967	6,318	759	7,858	15,447	2,410	112,186	4,061
1968	6,491	738	8,335	16,086	2,548	114,243	4,164
1969	6,492	699	8,205	15,929	2,705	113,981	4,234

1/ Preliminary. 2/ Excludes commercial lard. 3/ Includes horsemeat. 4/ On ready-to-cook basis. 5/ Milk for commercial use only.

Table 4.--Western Europe: Agricultural imports by country,

Commodity and year		SITC number: Major headings	SITC number: Sub headings 1/	European Economic Community: Belgium-Luxembourg	European Economic Community: Netherlands	European Economic Community: West Germany	European Economic Community: France	European Economic Community: Italy	European Economic Community: Total	Greece
				Million dollars						
Live animals	1966	00		19.0	10.1	113.8	54.1	204.1	401.1	12.1
	1967			36.6	15.0	53.1	67.7	270.7	443.1	10.3
	1968			45.4	18.3	66.1	92.9	284.1	506.8	16.2
Meat and meat preparations	1966	01		57.3	54.5	371.7	236.0	345.8	1,065.3	55.4
	1967			67.0	58.9	359.2	231.1	403.5	1,119.7	61.5
	1968			67.4	69.2	433.7	272.4	338.3	1,181.0	61.0
Dairy products and eggs	1966	02		73.2	38.6	240.5	50.7	158.7	556.7	21.0
	1967			78.0	47.2	236.8	49.2	166.6	577.8	21.6
	1968			83.1	60.8	247.5	50.5	205.6	647.5	22.6
Fish and fish preparations	1966	03		47.8	24.8	94.1	126.6	104.5	397.8	13.0
	1967			48.7	27.8	89.5	129.3	110.6	405.9	11.9
	1968			50.3	32.2	97.4	150.2	117.3	447.4	13.4
Cereals and cereal preparations	1966	04		218.9	253.6	585.8	136.0	553.3	1,747.6	29.1
	1967			242.6	271.0	570.8	131.4	495.2	1,711.0	24.4
	1968			247.9	286.6	510.7	134.5	502.9	1,682.6	15.4
(Wheat and flour)	1966		041,	46.4	43.8	128.9	58.7	96.5	374.3	1.4
	1967		046	43.0	53.2	151.4	52.3	74.4	374.3	1.0
	1968			55.4	87.4	150.8	38.2	111.1	442.9	0.5
(Rice)	1966		042	5.5	11.7	26.8	17.9	1.1	63.0	1.0
	1967			6.2	10.6	21.0	20.9	0.6	59.3	2.1
	1968			7.5	12.9	26.6	29.6	1.5	78.1	1.5
(Feed grains)	1966		043,	151.4	183.1	382.4	41.6	443.3	1,201.8	23.1
	1967		044,	175.8	191.2	353.5	39.2	408.0	1,167.7	18.0
	1968		045	163.2	166.9	286.8	39.0	375.1	1,031.0	8.8
Fruit and vegetables	1966	05		158.5	181.7	1,162.6	569.1	126.6	2,198.5	4.6
	1967			161.2	191.6	1,160.5	590.6	129.9	2,233.8	8.7
	1968			153.9	195.1	1,188.1	541.4	142.7	2,221.2	8.8
Sugar, sugar preparations, and honey	1966	06		14.9	25.6	64.4	87.3	16.0	208.2	5.1
	1967			14.9	30.4	58.9	79.1	13.3	196.6	5.5
	1968			17.0	34.2	63.0	72.4	10.5	197.1	5.2
Coffee, tea, cocoa, spices, etc.	1966	07		85.3	161.6	418.2	249.2	126.4	1,040.7	13.3
	1967			99.0	204.8	410.0	245.5	145.9	1,105.2	14.9
	1968			102.8	231.8	460.0	287.6	148.2	1,230.4	15.8
Animal feed	1966	08		87.6	153.6	325.1	141.9	79.0	787.2	8.9
	1967			90.2	164.2	289.6	150.3	84.8	779.1	8.6
	1968			96.6	186.7	288.0	149.9	103.5	824.7	7.1
(Oilseed cake and meal)	1966		081.3	37.2	59.9	226.3	110.5	17.3	451.2	2.4
	1967			36.4	59.4	192.8	116.4	24.0	429.0	2.9
	1968			37.2	61.0	184.6	116.1	23.8	422.7	2.6
(Meatmeal and fishmeal)	1966		081.4	13.6	23.6	64.8	17.3	21.9	141.2	3.3
	1967			12.3	21.1	66.2	16.1	19.4	135.1	2.7
	1968			14.1	24.5	67.7	15.5	19.4	141.2	1.3

See footnotes at end of table.

European Economic Community, and total Western Europe, 1966-68

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
138.4	0.1	3.0	1.4	16.1	9.6	0.6	22.1	8.9	0.2	613.6
140.1	0.2	1.8	0.8	6.4	5.0	1.2	29.8	9.1	0.4	648.2
135.5	0.3	2.4	1.1	2.9	4.0	1.1	29.8	12.8	0.3	713.2
1,048.3	6.3	28.6	1.6	21.2	77.9	7.9	0.5	90.5	10.1	2,413.6
1,027.4	5.6	33.4	2.0	18.2	76.3	21.5	0.4	78.2	1.5	2,445.7
957.3	7.8	40.0	2.2	15.1	66.1	13.3	0.5	80.5	1.2	2,426.0
546.2	0.7	8.6	5.0	14.3	37.1	2.0	0.4	20.4	0.1	1,212.5
569.9	0.6	9.3	4.7	12.5	35.6	1.9	0.7	21.7	0.1	1,256.4
479.7	1.2	8.9	5.7	12.0	34.6	1.2	0.7	24.8	0.1	1,239.0
173.6	8.6	51.0	31.8	13.0	22.2	15.4	3.5	15.7	9.1	754.7
186.3	7.8	50.6	28.0	13.8	23.1	31.2	3.3	19.0	7.9	788.8
184.7	6.5	54.0	26.5	14.0	24.4	16.2	3.5	19.5	8.0	818.1
620.9	49.6	32.5	64.6	69.2	104.3	58.5	46.0	230.0	11.5	3,063.8
612.7	55.5	29.9	59.0	43.4	106.9	44.0	35.2	217.6	14.7	2,954.3
556.7	50.0	30.2	41.5	37.0	85.8	51.8	36.7	148.1	10.4	2,746.2
323.8	25.3	6.5	2.2	7.9	33.5	29.2	22.1	5.6	5.5	837.3
298.5	25.9	3.3	3.2	1.9	31.6	22.6	15.3	0.5	4.6	782.7
290.9	20.2	4.5	1.1	1.4	23.7	15.6	17.2	0.4	3.5	821.9
17.5	1.1	2.3	1.3	6.0	6.3	5.2	0.4	---	1.8	105.9
18.9	1.1	2.7	1.3	6.5	5.6	3.3	0.5	---	2.1	103.4
23.9	1.1	2.9	1.4	7.0	5.0	6.0	0.5	0.8	2.2	130.4
262.6	18.9	9.1	49.0	51.6	50.9	22.9	19.9	221.5	3.3	1,934.6
276.2	23.4	7.0	46.3	30.8	53.6	16.9	15.9	212.7	6.7	1,875.2
225.5	23.1	5.2	29.4	23.6	42.4	29.0	14.8	142.7	3.8	1,579.3
880.1	60.1	153.6	55.0	77.9	153.6	11.4	33.9	38.2	47.9	3,714.8
901.6	58.1	149.8	53.3	81.1	159.5	6.8	35.0	34.8	44.3	3,766.8
838.6	57.6	159.9	52.5	79.5	159.7	8.0	32.0	22.8	42.1	3,682.7
299.6	17.3	15.6	6.8	4.9	22.3	20.8	8.0	30.2	13.4	652.2
284.4	17.4	15.7	6.8	4.8	23.5	23.4	6.3	27.7	16.4	628.5
251.1	18.4	16.7	5.5	4.8	24.0	23.1	4.9	33.6	15.3	599.7
448.9	41.1	115.1	59.6	32.7	62.2	10.1	22.0	50.3	54.4	1,950.4
469.5	41.1	111.7	57.6	36.0	59.2	10.8	24.0	46.1	56.9	2,033.0
461.3	40.4	115.8	58.5	39.7	70.4	11.9	26.1	51.5	53.5	2,175.3
192.3	17.0	59.1	97.4	19.1	31.0	5.7	18.3	40.3	10.3	1,286.6
185.1	17.5	53.7	80.8	20.3	35.3	6.8	17.5	26.4	9.1	1,240.2
189.4	15.8	50.7	67.7	19.8	26.9	9.2	19.2	25.6	9.5	1,265.6
104.1	15.1	42.1	87.9	9.9	11.9	2.1	9.6	13.6	5.0	754.9
91.4	15.3	37.6	74.7	11.0	12.4	2.0	8.6	2.2	4.1	691.2
92.3	14.3	33.6	63.1	9.8	8.3	3.5	10.0	5.6	2.5	668.3
60.8	0.5	10.2	5.8	7.6	7.5	1.8	2.1	23.7	4.7	269.2
64.5	0.5	9.7	3.0	7.8	8.0	2.2	2.6	21.1	4.8	262.0
71.6	0.2	10.8	2.0	7.8	8.2	2.7	2.7	17.0	6.7	272.2

--Continued

Table 4.--Western Europe: Agricultural imports by country, European

Commodity and year		SITC number: Major headings	SITC number: Subheadings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
				Million dollars						
Miscellaneous food preparations	1966	09		22.2	12.9	16.6	4.8	9.2	65.7	1.2
	1967			23.8	12.3	17.1	5.8	9.2	68.2	1.2
	1968			27.8	14.2	21.6	8.6	6.2	78.4	1.2
(Lard)	1966		091.3	4.9	3.7	2.6	2/	0.1	11.3	2/
	1967			3.6	3.1	2.6	2/	0.1	9.4	---
	1968			4.8	4.1	1.9	0.1	2/	10.9	2/
(Margarine and shortening)	1966		091.4	1.1	1.2	0.3	0.3	0.4	3.3	0.1
	1967			1.2	0.8	0.4	0.3	0.8	3.5	2/
	1968			1.7	1.2	0.3	1.5	1.2	5.9	2/
Beverages	1966	11		59.7	29.2	134.4	209.5	20.0	452.8	1.2
	1967			62.3	29.5	117.1	132.5	24.8	366,2	2/
	1968			64.0	33.1	135.7	124.1	29.6	386.5	1.5
(Nonalcoholic)	1966		111	4.0	1.4	3.3	1.1	0.2	10.0	0.1
	1967			4.9	1.2	3.5	1.6	0.1	11.3	2/
	1968			5.1	1.6	3.3	2.0	0.2	12.2	2/
(Wine)	1966		112.1	33.0	20.0	103.0	171.9	7.7	335.6	0.1
	1967			34.6	20.8	86.7	91.4	10.9	244.4	0.1
	1968			37.0	22.2	99.8	75.7	13.0	247.7	0.1
Tobacco, unmanufactured	1966	121		35.4	55.4	208.9	39.2	10.9	349.8	0.1
	1967			44.6	62.1	214.1	39.6	19.0	379.4	2/
	1968			35.9	55.9	193.8	15.6	11.3	312.5	0.2
Hides and skins	1966	21		31.8	36.8	199.3	141.8	155.0	564.7	8.3
	1967			28.2	31.4	161.0	105.6	147.1	473.3	5.6
	1968			30.5	30.0	192.9	106.6	141.1	501.1	4.6
Oil-seeds, oil nuts and oil kernels	1966	22		53.2	133.7	328.1	164.8	153.1	832.9	3.8
	1967			52.1	113.4	285.7	149.1	168.3	768.6	2.1
	1968			58.3	148.9	274.3	126.0	160.3	767.8	3.8
(Soybeans)	1966		221.4	20.5	49.4	197.4	14.4	59.5	341.2	0.1
	1967			26.2	50.6	183.1	16.0	70.7	346.6	2/
	1968			26.4	66.3	153.8	5.5	68.5	320.5	---
Natural rubber	1966	231.1		9.1	11.3	81.0	65.8	44.0	211.2	2.1
	1967			7.8	9.3	63.1	58.8	45.4	184.4	1.7
	1968			9.0	9.5	65.8	50.6	39.1	174.0	1.1
Natural fibers	1966	261-265		281.9	113.9	427.5	458.6	467.7	1,749.6	31.3
	1967			230.9	107.7	384.7	368.4	441.0	1,532.7	27.1
	1968			242.0	92.0	403.3	354.1	393.6	1,485.0	26.7
(Raw cotton)	1966		263.1	45.3	47.8	176.5	173.7	171.7	615.0	5.5
	1967			33.8	57.1	174.4	158.0	166.5	589.8	6.6
	1968			44.1	45.1	176.4	150.2	156.0	571.8	7.6
Crude animal and vegetable materials, n.e.s.	1966	29		25.8	43.3	259.9	98.1	57.1	484.2	2.7
	1967			26.1	47.5	249.7	99.6	59.8	482.7	3.0
	1968			27.6	48.9	268.2	103.1	57.1	504.9	2.8

See footnotes at end of table.

Economic Community, and total Western Europe, 1966-68--Continued

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
63.2	2.5	11.7	4.4	2.1	3.5	1.3	5.0	2.7	3.5	166.8
58.9	2.8	13.7	5.6	1.9	3.9	1.5	5.0	2.5	3.8	169.0
52.3	3.1	14.6	6.0	2.2	4.6	1.4	6.1	2.6	4.9	177.4
47.8	0.1	0.1	2/	0.1	0.3	0.5	2/	0.2	n.a.	60.4
38.5	0.1	0.1	0.1	2/	0.4	0.6	2/	0.1	n.a.	49.3
31.1	0.1	0.1	0.1	2/	0.2	0.3	0.1	0.1	n.a.	43.0
1.0	0.1	1.6	2/	0.6	0.2	2/	0.1	0.9	n.a.	7.9
0.7	2/	1.7	2/	0.3	0.2	---	0.3	0.9	n.a.	7.6
0.6	0.1	1.8	2/	0.2	0.1	2/	0.4	0.8	n.a.	9.9
152.5	7.1	34.1	17.4	11.1	49.3	0.8	8.9	9.0	7.4	751.6
176.8	7.5	38.9	18.3	11.6	53.7	1.0	8.7	10.5	8.4	701.6
182.4	9.1	42.4	18.2	10.7	58.9	1.2	9.8	12.2	7.2	740.1
0.3	0.1	0.2	0.2	0.3	3.0	0.1	2/	2/	---	14.3
0.3	0.1	0.5	0.2	0.5	3.5	0.1	0.1	2/	n.a.	16.6
0.4	0.1	1.0	0.3	0.5	3.6	0.2	2/	0.1	0.1	18.5
86.4	3.1	10.5	9.1	7.7	37.9	0.1	3.0	0.5	2.8	496.8
97.1	3.1	12.4	9.3	7.7	40.9	0.1	3.2	0.7	3.1	422.1
105.5	3.9	14.2	9.4	6.4	43.3	0.1	3.6	0.7	3.0	437.9
227.5	9.1	24.5	28.7	13.8	30.3	6.7	12.7	26.3	7.9	737.4
235.7	8.6	17.6	29.0	13.1	34.2	6.3	13.0	34.4	9.8	781.1
268.7	11.6	17.2	33.3	15.9	36.4	8.2	17.4	37.2	8.2	766.8
186.4	6.1	20.2	31.7	11.1	6.8	2.9	2.3	31.9	8.4	880.8
140.0	3.8	19.7	27.2	7.9	7.7	5.4	1.5	29.4	7.1	728.6
150.9	3.8	18.1	30.5	10.9	6.6	5.3	2.0	29.2	5.9	768.9
125.5	28.1	16.6	48.6	2.6	22.8	26.6	2.8	93.9	13.6	1,217.8
101.0	25.1	14.0	60.7	2.5	18.2	33.0	2.3	108.7	14.8	1,151.0
99.5	23.8	12.8	54.7	2.6	18.8	27.1	2.2	116.9	11.1	1,141.1
35.1	17.8	2/	34.8	2/	2/	---	---	79.2	7.7	515.9
29.1	18.9	0.1	52.5	2/	0.1	---	---	96.9	7.2	551.4
26.2	15.6	0.1	41.4	2/	2/	2/	---	103.3	4.5	511.6
97.1	3.1	13.8	3.6	5.9	3.8	3.0	1.5	22.8	6.8	374.7
86.2	2.4	11.1	3.5	5.6	3.2	2.9	1.2	18.8	4.3	325.3
81.0	2.1	9.2	2.9	6.1	2.5	2.6	1.4	20.6	2.8	306.3
576.3	11.4	29.8	18.5	51.2	70.4	74.9	23.0	85.9	25.6	2,747.9
504.3	10.5	26.5	17.9	43.1	73.6	69.2	21.9	53.8	19.0	2,399.6
481.1	8.4	21.9	13.2	46.0	71.3	84.3	22.7	68.5	19.7	2,348.8
131.1	2.7	9.8	4.1	16.2	27.8	51.9	4.2	46.6	13.6	928.5
104.2	2.7	9.4	5.3	14.6	33.8	46.6	3.8	18.5	8.1	843.4
121.6	2.2	8.8	3.5	15.6	32.7	59.7	4.4	36.3	10.8	875.0
136.3	11.9	46.4	26.4	20.6	35.4	4.6	3.3	13.1	19.8	804.7
132.4	12.6	48.5	25.2	20.9	36.8	5.1	3.5	12.9	17.7	801.3
123.6	11.4	48.6	23.8	21.9	39.9	5.7	3.4	13.9	15.9	815.8

--Continued

Table 4.--Western Europe: Agricultural imports by country, European

Commodity and year		SITC number: Major headings	SITC number: Sub headings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
				Million dollars						
Animal and vegetable oils and fats	1966	4		38.2	79.0	176.7	141.4	100.3	535.6	2.2
	1967			39.0	86.8	156.6	131.1	134.4	547.9	3.0
	1968			42.8	90.8	164.8	123.4	97.7	519.5	1.8
(Fish and marine oils)	1966		411.1	4.9	20.1	22.6	6.2	2.2	56.0	0.1
	1967			4.0	19.2	19.9	4.8	2.4	50.3	0.1
	1968			1.9	16.2	18.4	2.7	1.9	41.1	0.1
(Animal and vegetable oils and fats processed)	1966		431	3.5	3.7	12.1	17.4	7.6	44.3	0.5
	1967			6.1	6.1	12.7	18.8	8.0	51.7	0.6
	1968			7.7	7.0	16.3	19.0	10.6	60.6	1.0
Agricultural fats and oils 3/	1966			35.8	60.1	144.9	118.1	91.0	449.9	1.7
	1967			33.7	65.4	127.0	107.8	124.9	458.8	2.3
	1968			39.7	72.9	132.3	103.3	86.4	434.6	0.7
Total agricultural 4/	1966			1,227.3	1,339.6	4,986.9	2,770.9	2,578.4	12,903.1	197.5
	1967			1,259.1	1,429.2	4,662.3	2,556.2	2,715.3	12,622.1	195.9
	1968			1,306.4	1,549.0	4,842.5	2,530.1	2,623.5	12,851.5	192.0
Total imports	1966			7,174.0	8,017.6	18,022.5	11,839.6	8,571.3	53,625.1	1,222.8
	1967			7,175.9	8,337.5	17,350.6	12,377.5	9,826.6	55,068.1	1,186.3
	1968			8,333.4	9,292.6	20,150.0	13,926.5	10,252.6	61,955.0	1,391.7

1/ Since these are components of major headings, their values are not duplicated in totals.
2/ Less than $50,000.
3/ Agricultural fats and oils is the sum of 091.3 (Lard), 091.4 (Margarine and shortening), and 4 (Oils and fats) minus 411.1 (Fish and marine oils) and 431 (Processed oils and fats).
4/ Total agricultural is the sum of all major headings except 03 (Fish) and 11 (Beverages), plus the sum of 111 (Nonalcoholic beverages) and 112.1 (Wine), and minus the sum of 081.4 (Meatmeal and fishmeal), 411.1 (Fish and marine oils), and 431 (Processed oils and fats).

n.a. = Not available. n.e.s. = Not elsewhere specified.

Compiled from OECD Statistical Bulletin, Foreign Trade, Series B and C, 1966, 1967, and 1968 and other official sources. SITC is the Standard International Trade Classification, Revised.

Economic Community, and total Western Europe, 1966-68--Continued

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
					Million dollars					
177.7	8.2	22.3	13.8	25.2	19.9	8.8	6.3	32.8	3.2	856.0
173.0	6.0	21.3	11.4	23.7	18.3	10.7	5.3	26.0	2.4	849.0
162.7	7.1	22.4	9.9	21.4	16.2	10.6	6.2	23.7	2.1	803.6
34.2	4.9	6.8	5.9	0.2	0.6	2/	0.1	1.4	0.5	110.7
41.5	2.5	6.2	4.2	0.2	0.5	2/	0.1	1.3	0.5	107.4
22.2	3.8	4.4	2.4	0.2	0.4	0.3	2/	2.6	0.4	77.9
15.6	0.6	3.5	3.3	4.0	3.8	0.4	1.7	2.0	1.4	81.1
15.3	0.8	4.1	3.5	4.7	4.3	0.4	1.5	2.4	1.1	90.4
14.6	0.7	4.8	3.4	4.4	3.7	0.4	1.5	2.5	1.1	98.7
176.7	2.9	13.7	4.6	21.7	16.0	8.9	4.6	30.5	1.3	732.5
155.4	2.7	12.8	3.8	19.1	14.1	10.9	4.0	23.3	0.8	708.0
157.6	2.8	15.1	4.2	17.0	12.4	10.2	5.2	19.5	0.6	680.3
5,740.8	269.8	591.6	461.4	384.1	719.9	243.8	207.2	791.6	232.9	22,743.7
5,598.3	267.2	570.6	444.3	336.9	728.8	248.1	201.7	724.0	219.0	22,156.9
5,286.9	262.1	584.6	410.9	332.3	702.4	261.7	210.7	691.0	197.9	21,984.0
16,671.1	2,402.9	4,573.8	2,990.0	2,327.6	3,917.6	1,022.8	1,043.3	3,572.4	1,726.4	95,095.8
17,715.5	2,746.3	4,702.8	3,133.8	2,309.4	4,099.2	1,059.2	1,077.7	3,470.1	1,690.7	98,259.1
18,958.5	2,704.2	5,121.7	3,213.2	2,496.0	4,492.6	1,178.4	1,174.8	3,502.2	1,592.5	107,780.9

Table 5.--Western Europe: Agricultural imports from the United States by

Commodity and year	SITC number: Major headings	Sub headings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
			Million dollars						
Live animals	1966: 00		0.2	0.2	0.1	0.9	3.8	5.2	0.5
	1967:		0.1	0.1	2/	1.3	2.0	3.5	0.4
	1968:		0.3	0.1	2/	0.8	1.7	2.9	0.4
Meat and meat preparations	1966: 01		2.5	6.6	33.8	23.5	1.5	67.9	1.6
	1967:		3.2	6.6	22.1	21.2	1.8	54.9	1.1
	1968:		3.3	5.9	14.6	20.8	0.7	45.3	0.6
Dairy products and eggs	1966: 02		1.0	6.8	1.0	2/	3.9	12.7	0.8
	1967:		0.3	0.4	0.4	---	1.0	2.1	1.0
	1968:		0.2	0.1	0.3	2/	0.8	1.4	0.5
Fish and fish preparations	1966: 03		1.7	2.1	0.8	5.3	0.2	10.1	0.8
	1967:		1.8	2.8	1.5	4.8	0.3	11.2	1.1
	1968:		1.1	2.0	1.0	4.4	0.3	8.8	1.2
Cereals and cereal preparations	1966: 04		105.6	187.8	169.7	60.6	191.1	714.8	24.8
	1967:		76.0	156.4	128.3	56.3	66.2	483.2	19.7
	1968:		54.5	149.7	146.1	62.8	138.1	551.2	10.9
(Wheat and flour)	1966:	041,	8.9	36.8	38.6	27.7	14.6	126.6	1.1
	1967:	046	10.1	22.3	37.4	30.5	6.2	106.5	0.2
	1968:		12.4	26.3	36.2	27.7	16.4	119.0	2/
(Rice)	1966:	042	1.5	4.7	9.5	3.1	2/	18.8	1.0
	1967:		2.8	7.1	10.3	4.9	---	25.1	1.0
	1968:		4.3	8.4	13.6	7.1	---	33.4	1.4
(Feed grains)	1966:	043,	94.9	146.3	121.6	29.7	176.4	568.9	21.9
	1967:	044,	62.8	126.4	80.3	20.9	59.8	350.2	17.9
	1968:	045	37.5	114.1	96.1	28.0	121.7	397.4	8.8
Fruit and vegetables	1966: 05		15.1	16.0	38.3	18.2	6.1	93.7	0.3
	1967:		15.6	15.7	29.4	20.8	5.4	86.9	0.9
	1968:		10.1	10.0	22.9	16.3	5.6	64.9	1.1
Sugar, sugar preparations, and honey	1966: 06		1.1	0.7	1.0	1.4	0.1	4.3	2/
	1967:		1.3	1.1	1.0	0.8	0.3	4.5	2/
	1968:		0.6	1.5	1.0	0.3	0.4	3.8	0.1
Coffee, tea, cocoa, spices, etc.	1966: 07		0.5	0.6	0.5	0.4	0.8	2.8	2/
	1967:		0.8	0.6	0.4	0.4	0.8	3.0	2/
	1968:		0.7	0.7	0.3	0.5	0.4	2.6	2/
Animal feed	1966: 08		14.2	53.5	69.0	56.5	16.3	209.5	1.6
	1967:		16.3	54.4	67.8	59.3	21.0	218.8	1.1
	1968:		13.1	68.2	66.0	66.5	21.4	235.2	0.6
(Oilseed cake and meal)	1966:	081.3	12.1	20.9	66.3	55.6	12.1	167.0	1.0
	1967:		14.1	27.0	66.4	58.8	18.4	184.7	0.6
	1968:		10.6	31.7	59.5	65.5	18.9	186.2	0.2
(Meatmeal and fishmeal)	1966:	081.4	2/	2/	0.2	---	0.5	0.7	2/
	1967:		---	0.1	2/	---	2/	0.1	---
	1968:		2/	2/	0.1	2/	2/	0.1	2/

See footnotes at end of table.

country, European Economic Community, and total Western Europe, 1966-68

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
1.9	2/	0.8	0.2	---	2/	0.1	0.5	1.7	---	10.9
2.2	2/	0.4	2/	---	2/	0.6	0.6	1.5	---	9.2
2.9	2/	0.4	2/	2/	---	0.4	0.8	1.8	---	9.6
20.1	0.1	2.6	0.1	1.4	2.0	2/	---	1.1	0.3	97.2
16.7	0.2	1.9	0.1	1.1	1.4	---	---	0.2	0.2	77.8
19.1	0.2	2.2	2/	0.9	2.2	2/	2/	0.3	0.1	70.9
0.6	2/	2/	2/	2/	0.2	---	2/	0.7	---	15.0
0.3	2/	0.2	0.1	---	0.1	0.2	0.1	0.2	---	4.3
2/	2/	0.2	2/	2/	2/	2/	0.2	0.1	---	2.4
17.5	0.1	2.1	1.0	2/	0.3	2/	0.1	0.2	---	32.2
22.1	0.3	2.7	1.1	2/	0.4	2/	2/	0.2	---	39.1
9.1	0.1	1.8	0.5	2/	0.4	2/	0.1	0.2	---	22.2
210.4	22.7	13.3	26.5	19.5	23.0	22.9	19.7	127.5	3.8	1,228.9
159.1	14.6	8.4	20.4	0.8	9.3	12.9	10.2	71.3	1.2	811.1
136.3	12.4	6.7	12.1	1.2	8.4	8.7	7.7	40.0	1.3	796.9
43.6	11.8	4.5	2/	0.4	8.1	8.9	5.0	4.0	2.1	216.1
31.8	4.6	1.8	0.1	2/	4.2	5.9	2.4	0.1	0.3	157.9
11.1	3.2	0.9	0.1	---	3.2	2.2	1.2	---	0.4	141.3
7.6	2/	1.0	0.4	0.2	3.1	1.8	0.1	2/	---	34.0
11.3	0.1	1.0	0.5	0.3	2.3	---	0.1	---	0.2	41.9
14.6	0.1	1.1	0.4	0.5	2.6	2/	0.2	---	0.1	54.4
157.7	10.7	5.9	25.8	18.7	11.7	12.2	14.5	123.5	1.5	973.0
114.3	9.9	3.8	19.8	0.5	2.8	6.7	7.6	71.2	0.7	605.4
108.7	9.1	3.2	11.4	0.7	2.6	6.3	6.3	40.0	0.9	595.4
54.9	11.4	23.7	8.7	3.1	10.7	0.1	4.6	3.8	8.8	223.8
54.2	9.7	22.7	8.5	2.8	9.4	0.1	4.0	3.4	6.7	209.3
42.5	7.5	21.9	7.2	2.7	9.8	0.1	2.5	2.2	5.5	167.9
1.8	0.1	0.4	0.1	0.2	0.5	2/	0.4	2/	---	7.8
1.0	0.1	0.3	0.2	0.2	0.6	2/	2/	2/	---	6.9
1.3	0.1	0.2	0.2	0.1	0.5	2/	2/	2/	---	6.3
2.4	0.3	0.4	0.2	2/	0.2	2/	2/	0.1	0.7	7.1
1.8	0.3	0.5	0.2	2/	0.2	2/	2/	0.1	0.5	6.6
2.0	0.3	0.2	0.1	2/	0.2	---	2/	2/	0.2	5.6
3.5	0.8	1.9	16.9	2.1	2.2	1.3	5.1	12.1	---	257.0
2.2	0.1	0.7	11.8	3.6	3.0	1.1	4.9	1.8	---	249.1
3.5	0.1	2.4	9.1	3.6	3.7	2.6	6.0	4.6	---	271.4
2.1	0.7	1.8	16.0	1.9	1.3	1.1	5.0	11.0	---	208.9
1.0	2/	0.6	11.0	3.4	1.9	1.0	4.5	1.2	---	209.9
2.9	2/	2.1	8.4	3.4	2.7	2.4	5.7	4.1	---	218.1
2/	2/	2/	---	2/	---	2/	---	0.3	---	1.0
0.1	2/	---	2/	---	---	---	---	2/	---	0.2
2/	---	---	2/	---	2/	2/	2/	0.1	---	0.2

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Table 5.--Western Europe: Agricultural imports from the United States by country,

Commodity and year	SITC number: Major headings	SITC number: Sub headings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
			Million dollars						
Miscellaneous food preparations	1966: 09		0.4	2.6	1.0	0.2	0.4	4.6	0.2
	1967:		0.5	2.0	0.8	0.1	0.5	3.9	0.1
	1968:		0.2	1.0	1.0	0.3	0.4	2.9	2/
(Lard)	1966:	091.3	0.1	1.8	0.4	---	0.1	2.4	---
	1967:		0.2	1.5	0.3	---	2/	2.0	---
	1968:		---	0.1	0.2	---	2/	0.3	---
(Margarine and shortening)	1966:	091.4	2/	---	2/	---	2/	0.1	2/
	1967:		2/	---	2/	---	2/	0.1	2/
	1968:		---	---	---	---	---	---	2/
Beverages	1966: 11		0.1	0.2	0.8	0.3	0.2	1.6	2/
	1967:		0.1	0.2	1.0	0.5	0.3	2.1	2/
	1968:		0.2	0.3	1.6	0.7	0.4	3.2	2/
(Nonalcoholic)	1966:	111	2/	2/	2/	2/	---	2/	---
	1967:		---	2/	2/	2/	2/	2/	---
	1968:		---	---	---	2/	---	2/	---
(Wine)	1966:	112.1	2/	---	2/	2/	2/	2/	---
	1967:		2/	---	---	---	2/	2/	---
	1968:		2/	2/	---	2/	2/	2/	---
Tobacco, unmanufactured	1966: 121		9.9	19.8	90.6	5.6	3.0	128.9	2/
	1967:		13.0	24.1	106.1	5.0	6.2	154.4	2/
	1968:		10.5	24.7	77.4	1.4	5.7	119.7	0.2
Hides and skins	1966: 21		1.9	4.2	26.7	5.7	7.9	46.4	0.8
	1967:		1.1	2.5	16.6	4.2	7.4	31.8	0.4
	1968:		1.2	2.4	21.8	5.5	6.1	37.0	0.3
Oil-seeds, oil nuts and oil kernels	1966: 22		24.1	58.2	195.2	16.4	52.1	346.0	0.3
	1967:		30.9	56.6	178.1	17.3	57.8	340.7	2/
	1968:		31.3	74.4	163.2	8.3	58.5	335.7	---
(Soybeans)	1966:	221.4	20.5	48.3	185.2	14.2	51.5	319.7	---
	1967:		25.6	46.8	170.6	15.6	57.6	316.2	2/
	1968:		26.3	66.2	147.7	5.5	57.9	303.6	---
Natural rubber	1966: 231.1		2/	2/	2/	0.4	0.3	0.7	0.1
	1967:		2/	---	2/	0.6	0.1	0.7	0.1
	1968:		0.1	2/	2/	0.9	0.1	1.1	0.1
Natural fibers	1966: 261-265		7.7	9.0	22.7	22.3	25.1	86.8	0.1
	1967:		6.3	4.1	22.0	22.4	41.6	96.4	0.1
	1968:		6.7	4.1	13.4	21.0	33.8	79.0	2.1
(Raw Cotton)	1966:	263.1	5.5	7.2	16.1	20.3	21.9	71.0	0.1
	1967:		4.1	3.3	17.0	20.7	37.2	82.3	2/
	1968:		4.4	3.2	9.6	18.7	30.8	66.7	2.1
Crude animal and vegetable materials, n.e.s.	1966: 29		1.0	3.9	7.7	3.3	4.1	20.0	0.1
	1967:		1.0	3.9	7.2	2.9	2.8	17.8	0.1
	1968:		1.2	4.2	7.8	2.7	2.1	18.0	0.1

See footnotes at end of table.

European Economic Community, and total Western Europe, 1966-68--Continued

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
17.7	0.2	2.0	0.5	0.1	0.6	0.1	0.2	0.4	---	26.6
19.3	0.3	2.0	0.6	0.1	0.5	0.1	0.1	0.3	0.1	27.4
11.9	0.3	2.5	0.7	0.1	0.8	0.1	0.2	0.3	0.1	19.9
15.3	---	---	---	2/	0.2	2/	---	2/	---	17.9
15.5	---	---	---	2/	0.1	2/	---	---	---	17.6
9.6	---	---	---	2/	0.1	2/	0.1	2/	---	10.1
2/	0.1	---	2/	---	2/	---	---	---	---	0.2
---	2/	---	2/	---	---	---	---	---	---	0.1
---	0.1	2/	2/	---	---	---	---	---	---	0.1
0.6	0.1	0.6	0.2	2/	0.1	2/	2/	0.1	0.1	3.4
0.6	0.1	0.9	0.2	2/	0.1	2/	2/	0.1	0.1	4.2
1.0	0.2	1.0	0.2	2/	0.1	2/	2/	0.2	0.1	6.0
2/	---	2/	2/	---	2/	---	---	---	---	2/
2/	---	2/	2/	---	2/	---	---	---	---	2/
---	---	2/	2/	---	---	---	---	---	---	2/
2/	---	---	2/	---	2/	---	---	---	---	2/
2/	---	---	2/	---	2/	---	2/	2/	---	2/
2/	---	---	2/	---	2/	---	2/	---	---	2/
135.0	7.6	22.3	13.5	4.4	16.4	3.1	12.3	4.5	4.4	352.4
130.6	6.9	14.6	13.9	3.8	18.1	3.1	12.1	7.5	5.4	370.4
154.1	8.5	14.2	18.6	4.8	19.6	4.7	16.4	6.6	4.7	372.1
14.7	0.7	2.0	0.6	1.0	1.1	0.1	0.1	3.5	0.6	71.6
10.1	0.6	2.0	0.2	0.7	1.9	0.3	2/	3.3	0.3	51.6
13.4	0.3	2.3	0.1	1.2	0.5	0.2	0.1	3.4	0.7	59.5
18.4	18.1	0.1	34.9	2/	1.3	0.8	0.2	77.0	3.2	500.1
13.2	18.1	0.2	50.3	2/	1.1	---	0.4	92.9	0.9	517.8
12.4	16.6	0.2	41.5	2/	1.1	---	2/	103.4	0.5	511.4
16.1	17.8	2/	34.4	---	2/	---	---	75.4	3.0	466.4
10.9	17.9	2/	49.9	---	2/	---	---	91.9	0.9	487.7
11.3	15.6	0.1	41.3	2/	2/	---	---	101.4	---	473.3
0.1	2/	2/	2/	2/	0.1	2/	2/	2/	---	1.0
0.1	2/	---	2/	2/	2/	2/	2/	2/	---	1.0
0.1	---	2/	2/	2/	2/	2/	---	0.1	---	1.4
33.5	1.8	7.7	1.7	2.3	4.6	0.8	2.2	2.7	2.0	146.6
27.7	1.6	8.4	2.8	1.9	5.9	0.3	2.0	0.8	2.0	149.9
26.0	1.3	7.5	2.2	1.2	4.2	1.8	2.0	1.6	1.2	130.4
21.3	1.7	7.7	1.6	2.1	4.4	0.8	2.2	1.5	1.9	116.6
18.2	1.5	8.2	2.7	1.8	5.7	0.2	2.0	0.1	2.0	124.7
13.3	1.2	7.4	2.1	1.0	3.6	1.8	1.9	1.0	1.1	103.4
6.0	0.4	1.1	1.7	0.6	1.8	0.4	0.2	1.2	0.4	33.9
5.3	0.4	1.1	1.8	0.5	1.7	0.2	0.3	1.2	0.3	30.8
4.9	0.3	0.8	2.0	0.3	1.5	0.2	0.1	0.9	0.4	29.7

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Table 5.--Western Europe: Agricultural imports from the United States by country,

Commodity and year	SITC number: Major headings	SITC number: Sub headings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
			Million dollars						
Animal and vegetable oils and fats	1966: 4		2.1	15.4	18.3	3.2	17.2	56.2	1.2
	1967:		1.4	14.1	9.1	5.6	10.3	40.5	2.1
	1968:		1.3	11.7	10.2	2.9	6.7	32.8	0.3
(Fish and marine oils)	1966:	411.1	0.3	2.1	1.5	0.4	0.1	4.4	---
	1967:		0.1	1.7	0.5	---	---	2.3	---
	1968:		2/	2/	0.2	---	0.1	0.3	---
(Animal and vegetable oils and fats processed)	1966:	431	2/	0.2	1.4	0.4	0.5	2.5	2/
	1967:		0.1	0.4	1.6	0.4	0.5	3.0	2/
	1968:		0.1	0.4	1.3	0.2	0.5	2.5	2/
Agricultural fats and oils 3/	1966:		1.9	14.9	15.8	2.4	16.7	51.7	1.2
	1967:		1.4	13.5	7.3	5.2	9.9	37.3	2.1
	1968:		1.2	11.4	8.9	2.7	6.1	30.3	0.3
Total agricultural 4/	1966:		187.0	383.0	672.5	217.8	332.6	1,792.9	32.7
	1967:		167.6	340.4	587.2	217.8	224.7	1,537.7	27.3
	1968:		135.2	358.3	544.4	210.8	281.9	1,530.6	17.8
Total imports	1966:		569.1	910.1	2,293.2	1,199.4	1,049.1	6,020.8	131.2
	1967:		589.8	886.1	2,138.4	1,219.3	1,025.3	5,859.0	100.1
	1968:		689.1	1,014.3	2,173.0	1,318.7	1,193.3	6,388.4	106.8

1/ Since these are components of major headings, their values are not duplicated in totals.
2/ Less than $50,000.
3/ Agricultural fats and oils is the sum of 091.3 (Lard), 091.4 (Margarine and shortening), and 4 (Oils and fats) minus 411.1 (Fish and marine oils) and 431 (Processed oils and fats).
4/ Total agricultural is the sum of all major headings except 03 (Fish) and 11 (Beverages), plus the sum of 111 (Nonalcoholic beverages) and 112.1 (Wine), and minus the sum of 081.4 (Meatmeal and fishmeal), 411.1 (Fish and marine oils), and 431 (Processed oils and fats).

n.a. = Not available. n.e.s. = Not elsewhere specified.

Compiled from OECD Statistical Bulletin, Foreign Trade, Series B and C, 1966, 1967, and 1968 and other official sources. SITC is the Standard International Trade Classification, Revised.

European Economic Community, and total Western Europe, 1966-68--Continued

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
6.4	0.9	5.7	0.3	0.2	0.1	1.5	0.5	14.5	---	87.5
4.6	0.3	3.1	0.3	0.1	0.2	1.6	0.3	10.4	---	63.5
5.3	0.3	2.3	0.2	0.1	0.1	1.8	0.5	8.1	---	51.8
---	0.4	3.4	---	---	---	---	---	2/	---	8.2
---	---	2.3	---	---	2/	---	---	2/	---	4.6
---	---	2.0	---	---	---	---	---	---	---	2.3
1.9	2/	2/	2/	2/	2/	2/	2/	0.1	---	4.5
2.0	2/	2/	2/	2/	2/	2/	2/	0.1	---	5.1
2.4	2/	0.1	2/	2/	2/	2/	2/	0.1	2/	5.1
19.8	0.6	2.3	0.3	0.2	0.3	1.5	0.5	14.4	---	92.8
18.1	0.3	0.8	0.3	0.1	0.3	1.6	0.3	10.3	---	71.5
12.5	0.4	0.2	0.2	0.1	0.2	1.8	0.6	8.0	---	54.6
525.5	64.7	80.6	105.9	34.9	64.8	31.2	45.9	250.4	24.2	3,053.7
446.3	53.2	64.2	111.2	15.6	53.4	20.5	35.0	194.8	17.6	2,576.8
433.3	48.2	61.9	94.0	16.2	52.6	20.6	36.5	173.2	14.7	2,499.6
2,020.7	179.6	427.5	236.5	100.9	354.4	81.6	97.6	608.9	97.4	10,357.2
2,215.4	176.0	436.5	269.4	80.6	343.9	72.8	87.1	584.5	83.1	10,308.4
2,536.3	206.1	474.5	273.7	83.5	402.5	85.9	86.7	590.2	72.3	11,306.9

Table 6.--Western Europe: Agricultural exports by country,

Commodity and year	SITC number: Major head-ings	SITC number: Sub head-ings 1/	European Economic Community: Belgium-Luxembourg	European Economic Community: Netherlands	European Economic Community: West Germany	European Economic Community: France	European Economic Community: Italy	European Economic Community: Total	Greece
			Million dollars						
Live animals	1966: 00		19.3	29.7	27.5	36.4	0.9	113.8	1.1
	1967:		41.2	36.6	51.4	54.1	0.7	184.0	0.9
	1968:		61.5	46.9	59.7	91.6	0.7	260.4	0.9
Meat and meat preparations	1966: 01		69.1	386.0	16.6	117.3	27.1	616.1	2/
	1967:		109.4	414.3	33.2	119.6	20.8	697.3	2/
	1968:		124.2	514.9	61.0	165.1	24.0	889.2	2/
Dairy products and eggs	1966: 02		68.8	327.8	63.3	238.8	39.8	738.5	1.0
	1967:		82.8	336.3	97.3	272.3	37.6	826.3	1.0
	1968:		86.3	368.7	114.9	295.9	38.4	904.2	0.9
Fish and fish preparations	1966: 03		11.3	72.5	33.3	23.7	4.0	144.8	1.7
	1967:		12.8	74.6	35.0	25.8	4.5	152.7	1.5
	1968:		14.1	81.3	39.6	24.6	6.0	165.6	1.8
Cereals and cereal preparations	1966: 04		71.6	69.8	90.2	584.7	62.5	878.8	32.8
	1967:		64.1	97.8	75.5	575.9	86.9	900.2	32.0
	1968:		88.9	144.8	81.7	748.7	70.6	1,134.7	13.8
(Wheat and flour)	1966:	:041,	16.4	8.1	33.5	277.2	19.6	354.8	29.0
	1967:	:046	7.0	22.0	34.1	201.9	41.7	306.7	25.3
	1968:		22.9	42.9	38.7	339.7	13.7	457.9	9.3
(Feed grains)	1966:	:043,	15.6	19.8	18.6	268.5	16.7	339.2	---
	1967:	:044,	16.8	32.8	7.9	326.3	2.8	386.6	5.1
	1968:	:045	19.9	46.1	4.1	350.2	1.6	421.9	2.7
Fruits and vegetables	1966: 05		82.3	329.2	36.0	178.0	591.4	1,216.9	90.5
	1967:		92.6	357.3	46.1	192.5	605.5	1,294.0	94.6
	1968:		98.9	367.1	55.8	203.4	567.0	1,292.2	94.0
Sugar, sugar preparations, and honey	1966: 06		22.1	34.0	9.6	96.2	4.4	166.3	1.1
	1967:		27.2	34.1	12.4	67.1	8.3	149.1	1.1
	1968:		29.8	38.7	19.2	82.8	11.8	182.3	0.8
Coffee, tea, cocoa, spices, etc.	1966: 07		19.8	113.6	24.6	13.9	17.3	189.2	0.3
	1967:		24.2	157.4	32.9	14.9	18.7	248.1	0.2
	1968:		28.5	189.6	45.8	15.7	21.9	301.5	0.2
Animal feed	1966: 08		27.9	58.4	43.1	64.0	15.0	208.4	0.3
	1967:		25.5	58.0	62.4	63.4	14.6	223.9	1.8
	1968:		28.7	73.9	63.1	74.6	10.7	251.0	1.1
(Oilseed cake and meal)	1966:	:081.3:	7.6	30.2	22.8	9.6	10.2	80.4	0.3
	1967:		9.2	25.5	30.8	6.2	9.9	81.6	1.7
	1968:		11.0	35.3	25.2	8.5	4.9	84.9	0.8
(Meatmeal and fishmeal)	1966:	:081.4:	2.3	1.5	1.3	5.0	2/	10.1	---
	1967:		1.3	0.8	1.3	2.9	2/	6.3	---
	1968:		1.5	2.4	2.3	4.2	2/	10.4	---
Miscellaneous food preparations	1966: 09		28.1	65.7	12.2	31.6	8.0	145.6	0.1
	1967:		24.9	68.6	14.7	28.5	9.7	146.4	0.2
	1968:		19.8	69.5	19.7	23.8	13.8	146.6	0.2

See footnotes at end of table.

European Economic Community, and total Western Europe, 1966-68

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
					Million dollars					
63.8	2/	1.6	60.9	24.9	2.9	0.6	139.1	5.7	0.4	414.8
70.6	2/	1.1	39.3	39.4	2.7	0.8	135.6	1.3	0.3	476.0
48.0	0.1	0.8	47.9	42.5	3.5	0.3	130.1	1.6	0.3	536.4
35.8	6.3	45.6	596.4	9.7	1.6	0.7	113.7	1.7	2.0	1,429.6
28.3	7.2	42.8	578.4	9.4	2.2	0.6	161.5	3.7	7.7	1,539.1
18.4	4.9	36.7	528.1	7.0	3.3	0.6	141.6	3.0	3.7	1,636.5
33.5	11.9	13.2	219.4	25.5	60.4	3.6	43.9	0.2	43.7	1,194.8
30.6	12.7	9.1	219.4	30.5	64.5	3.4	53.2	0.2	38.3	1,269.2
31.3	10.4	11.2	191.2	19.6	73.5	3.8	52.3	0.3	37.2	1,335.9
27.7	147.6	8.3	100.1	0.3	0.7	49.5	7.0	49.2	0.1	537.0
26.2	141.3	7.2	97.3	0.4	0.7	50.1	6.4	51.3	0.1	535.2
26.4	141.7	8.1	103.1	0.5	0.6	49.1	6.4	49.3	0.1	552.7
116.5	1.3	34.5	36.9	2.0	7.1	0.6	4.2	8.5	4.1	1,127.3
111.9	1.7	43.2	29.8	4.0	7.7	0.6	4.6	63.5	0.8	1,200.0
95.2	1.6	38.9	25.3	2.6	8.6	0.6	4.8	59.7	1.4	1,387.2
1.5	2/	8.8	5.3	2/	0.1	---	0.2	---	2.0	401.7
1.5	0.3	15.3	2/	2.0	0.1	2/	0.2	47.4	---	398.8
1.2	2/	16.6	0.1	2/	0.1	2/	0.1	43.4	---	528.7
67.0	---	13.4	15.9	0.2	2/	2/	2/	0.1	1.6	437.4
60.7	---	17.6	15.7	0.4	2/	2/	0.1	0.1	---	486.3
37.4	---	14.0	9.7	0.2	2/	0.1	0.1	2/	2/	486.1
42.7	1.8	8.9	14.2	5.5	8.1	33.5	9.4	365.0	2.2	1,798.7
36.1	1.9	9.4	13.2	6.1	10.5	44.7	9.7	356.9	2.2	1,878.4
38.0	1.4	8.9	13.3	5.9	11.7	52.2	10.6	354.7	0.7	1,883.6
60.5	0.4	1.9	8.8	1.2	2.3	0.1	4.7	4.2	1.6	253.1
63.7	0.5	2.8	9.9	1.7	3.0	0.1	4.7	4.6	3.8	245.0
59.2	0.5	3.4	15.6	1.9	4.2	0.1	4.8	4.1	4.8	281.7
37.6	1.1	3.0	3.3	1.3	33.3	1.0	20.9	10.3	1.6	302.9
40.9	1.5	3.2	4.2	4.5	29.0	0.8	24.9	11.7	2.4	371.4
42.6	1.1	3.5	3.5	6.4	29.2	0.8	23.7	12.8	2.5	427.8
21.4	48.7	1.3	38.1	1.5	1.3	4.2	5.4	1.3	---	331.9
23.3	78.7	0.6	43.0	1.7	1.3	4.9	8.4	3.3	---	390.9
19.7	65.5	0.9	51.6	1.2	1.6	2.0	8.0	2.1	0.1	404.8
n.a.	0.5	0.1	14.1	2/	0.3	1.8	0.3	0.5	---	98.3
n.a.	3.9	2/	16.5	2/	0.2	2.9	0.4	2.4	---	109.6
n.a.	4.0	2/	12.7	---	0.5	0.2	0.4	1.0	---	104.5
n.a	48.0	0.2	13.1	0.1	2/	1.4	0.9	2/	---	73.8
n.a.	74.5	0.1	13.1	0.2	2/	0.8	1.3	---	---	96.3
n.a.	61.4	0.2	25.0	0.1	2/	0.8	1.0	---	---	98.9
32.3	5.0	2.9	12.9	1.6	14.8	1.4	3.5	0.6	---	220.7
30.9	4.8	2.8	12.8	1.5	16.3	1.7	2.7	0.2	---	220.3
32.6	5.3	3.6	13.3	1.0	19.7	1.6	2.4	0.2	0.1	226.6

--Continued

Table 6.--Western Europe: Agricultural exports by country, European

Commodity and year	SITC number: Major headings	SITC number: Sub headings 1/	European Economic Community: Belgium-Luxembourg	Netherlands	West Germany	France	Italy	Total	Greece
			Million dollars						
Beverages	11								
1966			19.9	36.4	44.2	324.2	80.6	505.3	6.7
1967			20.2	40.9	48.8	344.4	85.1	539.4	7.3
1968			21.3	46.8	54.5	379.5	93.9	596.0	8.9
(Nonalcoholic)		111							
1966			1.8	4.3	1.8	11.7	3.0	22.6	2/
1967			2.0	4.7	2.1	12.1	3.9	24.8	2/
1968			2.4	4.1	2.4	12.3	4.4	25.6	2/
(Wine)		112.1							
1966			6.2	1.3	15.9	191.6	72.1	287.1	5.8
1967			5.1	3.1	18.0	198.3	74.8	299.3	5.8
1968			4.1	5.3	19.6	216.2	81.3	326.5	6.9
Tobacco, unmanufactured	121								
1966			2.2	8.5	3.4	1.8	10.2	26.1	111.6
1967			1.6	8.3	5.6	1.3	9.8	26.6	137.3
1968			2.8	9.7	4.9	1.8	10.5	29.7	99.9
Hides and skins	21								
1966			14.9	39.4	42.4	47.6	13.8	158.1	13.0
1967			13.4	35.4	38.2	46.3	11.3	144.6	11.4
1968			13.2	34.2	36.1	52.0	13.0	148.5	13.1
Oil-seeds, oil nuts and oil kernels	22								
1966			5.1	8.4	2.1	17.9	0.5	34.0	0.1
1967			4.9	7.9	3.2	14.7	0.5	31.2	0.1
1968			4.6	9.3	3.1	14.4	0.5	31.9	0.2
Natural rubber	231.1								
1966			0.7	0.4	0.9	0.3	2/	2.3	2/
1967			0.7	1.2	0.8	0.6	2/	3.3	---
1968			1.2	1.7	0.4	0.5	0.1	3.9	---
Natural fibers	261-265								
1966			138.5	42.0	49.6	156.7	18.1	404.9	29.4
1967			121.3	44.3	45.9	129.2	19.0	359.7	42.7
1968			113.5	37.8	53.1	139.5	17.5	361.4	35.6
Crude animal and vegetable materials, n.e.s.	29								
1966			34.6	206.4	47.0	48.0	55.6	391.6	5.4
1967			35.8	227.2	48.9	49.6	53.2	414.7	5.1
1968			35.2	242.8	54.3	52.3	57.4	442.0	5.5
Animal and vegetable oils and fats	4								
1966			17.5	57.8	64.8	36.5	15.2	191.8	6.2
1967			21.1	61.7	72.4	33.3	15.1	203.6	24.0
1968			23.6	80.8	82.3	32.2	17.8	236.7	26.9
Agricultural oils and fats 3/									
1966			18.7	67.7	40.5	43.7	15.7	186.3	6.2
1967			20.3	64.5	46.4	38.4	14.4	184.0	23.8
1968			23.0	78.2	52.5	34.6	20.4	208.7	26.0
Total agricultural 4/									
1966			624.1	1,758.1	522.3	1,863.7	953.4	5,721.6	298.7
1967			691.5	1,925.2	630.0	1,866.5	988.5	6,101.7	358.0
1968			759.3	2,205.8	739.6	2,213.9	959.5	6,878.1	299.1
Total exports									
1966			6,829.0	6,752.3	20,134.1	10,886.2	8,031.9	52,633.5	406.0
1967			7,032.4	7,287.6	21,735.7	11,377.5	8,701.7	56,134.9	495.2
1968			8,164.0	8,341.7	24,842.5	12,672.3	10,183.2	64,203.7	467.7

1/ Since these are components of major headings, their values are not duplicated in totals. 2/ Less than $50,000. 3/ Agricultural fats and oils include lard, margarine and shortening and all other oils and fats except marine and processed. 4/ Total agricultural is the sum of all major headings except 03 (Fish) and 11 (Beverages) plus the sum of 111 (Nonalcoholic beverages) and 112.1 (Wine), and minus the sum of 081.4 (Meatmeal and fishmeal), Marine oil, and Processed oils and fats.

Economic Community, and total Western Europe, 1966-68--Continued

United Kingdom	Norway	Sweden	Denmark	Austria	Switzerland	Portugal	Ireland	Spain	Finland	Total Western Europe
Million dollars										
383.1	1.0	0.6	30.1	2.3	1.9	49.7	23.0	50.5	1.0	1,055.2
381.8	1.0	0.5	32.6	2.5	2.3	56.9	24.0	57.3	2.1	1,107.7
472.7	1.9	0.5	34.5	2.2	2.7	61.1	22.3	58.1	1.9	1,262.8
6.7	2/	0.2	1.3	0.3	0.3	0.4	2/	0.1	---	31.9
7.0	2/	0.2	1.6	0.3	0.4	0.3	2/	0.1	---	34.7
7.0	0.1	0.2	1.6	0.2	0.5	0.4	0.1	0.2	0.1	36.0
1.3	---	2/	0.7	0.8	0.7	47.2	n.a.	47.0	---	390.6
1.2	---	2/	0.7	0.7	0.7	51.7	n.a.	53.0	---	413.1
1.3	---	2/	0.7	0.8	0.8	58.0	n.a.	53.5	2/	448.5
2/	2/	2/	0.2	0.4	2/	---	2/	0.1	---	138.4
2/	2/	2/	0.3	0.2	2/	---	2/	0.2	---	164.6
2/	2/	2/	0.3	0.3	2/	---	2/	0.1	2/	130.3
19.8	37.0	39.4	65.9	3.5	9.5	0.7	6.6	7.2	28.6	389.3
20.6	33.8	31.0	54.8	4.1	9.5	0.6	7.7	5.5	26.1	349.7
20.0	38.4	31.4	73.1	4.2	10.2	0.6	7.2	3.8	32.9	383.4
0.8	---	2.0	6.0	1.6	2/	2/	---	0.2	---	44.7
0.8	---	2.3	4.0	1.7	2/	0.1	---	0.4	---	40.6
1.0	---	5.2	2.8	0.4	2/	0.1	---	0.4	---	42.0
n.a.	2/	2.7	2/	---	2/	2/	n.a.	---	---	5.0
n.a.	2/	2.0	2/	---	2/	2/	n.a.	2/	---	5.3
n.a.	2/	1.5	2/	2/	2/	0.1	n.a.	2/	---	5.5
162.7	2.4	2.5	2.0	1.9	8.0	0.9	14.3	8.4	---	637.4
127.4	1.9	1.8	1.8	1.5	7.3	---	10.2	7.8	0.1	562.2
121.7	1.9	2.8	1.1	1.5	7.1	0.5	10.1	6.3	0.2	550.2
11.9	4.1	4.1	60.4	3.1	5.2	4.6	2.8	13.4	1.8	508.4
10.6	3.9	4.6	60.1	3.6	5.5	5.2	2.9	14.7	2.0	532.9
11.2	3.3	4.7	64.8	4.2	6.6	4.7	3.4	13.3	1.9	565.6
17.1	51.6	12.4	25.3	0.7	3.6	8.2	2.4	47.7	2.3	369.3
16.5	43.5	14.4	28.1	0.5	3.8	8.6	2.3	65.1	3.8	414.2
17.3	28.7	13.2	23.9	0.7	4.5	8.7	2.3	32.8	3.5	398.3
11.2	4.3	8.4	21.8	0.6	2.5	6.7	2.8	46.9	1.3	299.0
11.7	4.2	9.8	20.9	0.4	2.9	7.9	2.8	64.3	2.6	335.3
11.7	4.1	9.2	16.9	0.6	3.4	8.4	2.5	32.3	2.1	325.9
654.0	73.1	171.5	1,129.5	85.3	157.5	104.2	369.7	520.8	87.3	9,373.2
610.2	74.3	166.1	1,075.7	111.1	163.0	121.8	426.9	591.4	86.3	9,886.5
553.9	74.2	162.0	1,022.3	100.2	183.1	133.2	400.2	548.4	88.0	10,442.7
,118.2	1,563.3	4,272.5	2,401.8	1,683.6	3,251.6	619.5	658.8	1,253.6	1,505.8	84,368.2
,862.2	1,736.4	4,528.1	2,473.6	1,808.8	3,471.1	701.4	760.2	1,384.1	1,527.8	88,883.8
,822.2	1,936.5	4,937.3	2,582.3	1,988.7	3,948.6	731.9	776.1	1,589.2	1,635.7	99,619.9

Note: Trade data for the United Kingdom do not include re-exports.

n.a. = Not available. n.e.s. = Not elsewhere specified.

Compiled from OECD Statistical Bulletin, Foreign Trade, Series B and C, 1966, 1967, and 1968 and other ficial sources. SITC is the Standard International Trade Classification, Revised.

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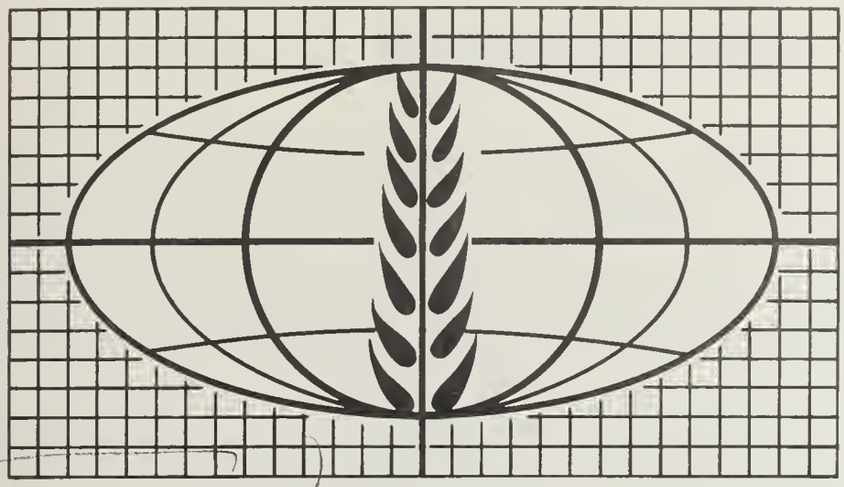

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THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

ABSTRACT

The agricultural situation developed unevenly in the Communist areas during 1969. China's progress was most significant, particularly in grain output. The Soviet Union reported declines in all major crops and experienced a 5 percent drop in net agricultural output. Drought in Czechoslovakia, East Germany, and Poland sharply lowered feed supplies. Higher corn production than the previous drought year in Bulgaria, Hungary, Romania, and Yugoslavia improved exports. North Korea, North Vietnam, and Mongolia showed no substantial change from previous years, and Cuba's major effort in 1969/70 is tied to the planned 10 million-ton sugarcane harvest. U.S. exports to Eastern Europe and the Soviet Union declined about 20 percent from the 1968 levels.

Key Words: Communist areas 1969 agricultural report. Production, consumption, trade, and outlook for 1970.

FOREWORD

The Agricultural Situation in Communist Areas: Review of 1969 and Outlook or 1970 presents a comprehensive review of agricultural developments in the oviet Union, Eastern Europe, and Mainland China. Significant highlights and roduction results for North Korea, North Vietnam, Mongolia, and Cuba are also ncluded for the first time. The emphasis of the report is on policy, produc- ion, and trade developments that are of concern to U.S. interests.

This report was prepared by the Communist Areas Group, under the super- ision of Roger E. Neetz. Members of the Group include Linda A. Bernstein, ynn S. Bickley, Paige I. Bryan, Marion R. Larsen, Melvenia L. Peed, avid M. Schoonover, and Thomas A. Vankai. Acknowledgment is extended to the oreign Agricultural Service, especially to Agricultural Attache personnel, for ssistance.

The Agricultural Situation in Communist Areas is one of five regional sup- lements to The World Agricultural Situation: Review of 1969 and Outlook for 970, FAER 57. Other regional reports are published on Western Europe, Africa nd West Asia, the Western Hemisphere, and the Far East and Oceania. Data in his report may vary slightly from those in The World Agricultural Situation, s this is based on information available as of March 1, 1970.

G. Stanley Brown, Chief
Europe and Soviet Union Branch
Foreign Regional Analysis Division

CONVERSION EQUIVALENTS

Pounds per bushel

Wheat and potatoes	60
Rye and corn	56
Barley	48
Oats	32

One kilogram	equals	2.2046 pounds
One centner or metric quintal	"	220.46 pounds
One metric ton	"	10 centners or 2204.6 pounds
One hectare	"	2.471 acres
One acre	"	0.4 hectare
One kilometer	"	0.6 mile

Metric tons to bushels

One metric ton	Bushels
Wheat and potatoes	36.743
Rye and corn	39.368
Barley	45.929
Oats	68.894

Bushels to metric tons

One bushel	Metric tons
Wheat and potatoes	.02722
Rye and corn	.02540
Barley	.02177
Oats	.01452

To convert centners per hectare to bushels per acre, multiply by:

Wheat and potatoes	1.487
Rye and corn	1.593
Barley	1.8587
Oats	2.788

To convert bushels per acre to centners (metric quintals) per hectare, multiply by:

Wheat and potatoes	0.672
Rye and corn	0.627
Barley	0.538
Oats	0.358

One metric ton of seed cotton = 1.562 bales of 480 pounds.
One metric ton of ginned cotton = 4.593 bales of 480 pounds.

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April 1970

Table 1.--Eastern Europe and Soviet Union: Indexes of agricultural production, total and per capita, 1963-69 1/

(1957-59 = 100)

Country	Total							Per capita						
	1963	1964	1965	1966	1967	1968	1969 2/	1963	1964	1965	1966	1967	1968	1969 2/
Bulgaria	113	128	135	156	152	135	147	108	121	127	146	141	125	134
Czechoslovakia	105	108	94	111	116	127	122	101	103	89	105	109	119	114
East Germany	100	105	112	111	122	121	107	101	107	114	113	124	123	108
Hungary	105	107	109	116	121	123	134	103	104	106	113	117	118	129
Poland	117	121	122	128	133	139	132	110	112	111	116	120	124	117
Romania	109	114	125	143	142	137	138	105	109	119	135	133	127	127
Yugoslavia	111	118	107	133	129	124	139	105	110	99	121	116	111	123
Eastern Europe	110	115	116	127	130	131	130	106	110	110	120	122	122	120
USSR	103	122	116	137	135	143	136	95	111	104	121	119	124	117
Eastern Europe and USSR	106	120	116	134	133	139	134	99	111	106	121	119	124	118

1/ These USDA indexes are based on the value of calendar year crop and livestock product output, weighted in terms of 1957-59 average West European producer or wholesale prices, in U.S. dollars. Deductions are made for the value of crops used to produce livestock output. This deduction is based on the value of the output assigned to feed in Food Balances for 8 East European Countries, 1959-61, ERS-Foreign 124, Economic Research Service, U.S. Department of Agriculture. 2/ Preliminary.

THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

SUMMARY

Agriculture in the Communist countries showed surprisingly few major production and policy changes during the past year. The terminal year in the last decade was a disappointing one for the Soviet Union, but a step forward for China. Eastern Europe showed some slippage. Gains over the 1968 drought year were made for Bulgaria, Hungary, Romania, and Yugoslavia. Declines in 1969 developed in the northern countries--East Germany, Czechoslovakia, and Poland--because of the late summer drought.

Plans for 1970 indicate an ambitious 8.5-percent increase in output for the Soviet Union, moderate to strong increases for most East European countries, and a note of optimism for Communist Asia.

U.S. agricultural exports to Eastern Europe and the Soviet Union declined 20 percent in 1969. Poland, our major trading partner in the area, cut back its purchases of U.S. farm products by $34.5 million. 1/ East Germany continues to show strong interest in U.S. feed grains. Soviet purchases of U.S. farm products rose from $5.3 million in 1968 to $11.6 million in 1969.

Crop output declined in the Soviet Union last year. Grain and sunflowerseed production each declined about 6 percent; cotton and sugar beets were off 4 and 24 percent, respectively. 2/ These four commodities represent the major agricultural exports of the Soviet Union. The livestock sector showed mixed results. Milk output decreased 1 percent, meat held at the 1968 level, eggs increased 4 percent.

To insure grain supplies for internal and external commitments, the Soviets agreed to purchase 3.5 million tons of wheat from Canada through 1971. Around 2 million tons will be shipped before the end of 1970. Because of lower production, sunflowerseed and cotton exports are expected to decline in 1970 from 1969 levels. Soviet sugar exports could remain high because of the probable increase of supplementary supplies from Cuba. USSR meat and poultry imports from Western sources moved upward sharply in the first quarter of 1970, reflecting some shortages in East European export markets and the below planned output of the livestock sector in 1969.

For Eastern Europe, the summer drought in Czechoslovakia, East Germany, and Poland caused significant production declines in potatoes (15 percent) and

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1/ Values are in U.S. dollars unless indicated otherwise.
2/ Volume is in terms of metric tons.

in sugar beets (27 percent). Oilseed production, particularly rapeseed, dropped off sharply because of severe winterkill. Grain production in the northern countries held at the 1968 level.

Total grain output for all Eastern Europe increased 5 percent over 1968. Hungary, Czechoslovakia, and Yugoslavia showed the largest increases. Wheat output increased 2 percent for the area even though declines developed in Romania and East Germany.

Imports of grain by the major importers--Czechoslovakia, East Germany, and Poland--probably reached 6.2 million tons in 1969, up around 500,000 tons from a year earlier. Exports of the 1970 grain crop by the southern countries may top the 1969 level. Hungary, a net importer in recent years, reported an export potential of 700,000 tons for the 1969/70 trade year.

The livestock sector in Eastern Europe showed weakness in 1969. Animal numbers were lower in the area and meat production declined. Meeting livestock goals is still a major problem for all countries. The price-cost squeeze, feed problems, disease, and peasant attitudes are major deterrents to higher output.

China's agricultural output in 1969 showed more strength than in 1968. Grain output (including tubers) likely reached 200 million tons. Oilseeds, particularly soybeans, increased but cotton held at 1968's level. Optimistic statements suggested gains in the livestock sector in 1969. Hog numbers may have reached the pre-Cultural Revolution level.

Large commercial purchases of grain in overseas markets highlighted China' 1969 trade activities. China contracted for approximately 7.5 million tons of grain. Actual imports for 1969 were an estimated 4.5-5.0 million tons. Low world prices and the global wheat glut probably influenced last year's purchases.

North Vietnam showed signs of rebuilding in the countryside. Labor discipline increased and programs were introduced to help alleviate a deteriorating labor situation. Grain output increased moderately--primarily on the strength of a 80,000-hectare increase in the planted area of rice. But about 400,000 to 600,000 tons of grain were imported from China and the Soviet Union. North Korea claimed a 1969 harvest exceeding the 5.5 to 5.7 million tons in 1968. Mongolia's grain output of about 320,000 tons was below the 1968 level.

Cuba's agricultural program in 1969 was dominated by the planned 10-million-ton sugarcane harvest for 1969/70. By mid-March about 4.5 million tons of sugarcane had been harvested. Gains were made last year in rice and egg production. All foods, including sugar, are still rationed.

SOVIET UNION

SETBACK IN AGRICULTURE

After a record year in 1968, Soviet gross agricultural production dropped 3 percent to the 79.0-billion-ruble level in 1969. This was a disappointing 7.1 percent below planned agricultural output. The USDA production index showed a 5 percent decline from 1968. 3/

The 3-percent decrease was brought about by lower production in grains, especially wheat, and most industrial crops. Livestock production failed to advance as planned. Only egg production increased. Meat showed no improvement and milk and wool were down slightly. All major economic indicators showed slower rates of growth in 1969, making it an acceptable year in terms of total output, but a setback in terms of planned progress during the period 1966-70.

The agricultural shortfall in 1969 was attributed mainly to weather. A severe winter, late spring, and a wet harvest contributed to reduced yields for all major crops. Favorable policy changes introduced since 1965--larger bonuses for quality work, higher state purchasing prices, increased inputs, and better varieties of seed--probably prevented a sharper drop in output. Through the implementation of some of these programs total output has been able to maintain the plateau reached in the late sixties, but raising output above this level will become increasingly expensive in terms of fixed and working capital needs.

CROP OUTPUT LOWER

The weakest showing in agriculture appeared in the crop sector, and weather played a major role in this downturn of production. Lags in labor productivity and capital inputs were also evident in 1969, negating in part the effects of increased usage of fertilizer, herbicides, and new wheat strains. Weather then is only one of many factors that has held crop output at a plateau since 1966.

3/ The USDA index of Soviet agricultural production measures the final output of major crops and livestock products using USDA estimates and weighted by 1957-59 West European producer prices. It does not measure changes in livestock numbers or changes in the weight of live animals. Seed and waste are considered constants. Net output is estimated by deducting feed inputs as a constant percentage of the value of livestock production--meat, milk, eggs, and wool. The index is more sensitive to changes in final output than would be the case with indexes valuing changes in livestock numbers and/or the weight of live animals.

Fall sowing of winter grains for the most part was carried out during the optimum periods although a little later than in the previous year. The winter grain area was down to about 27 million hectares from 33 million hectares in both 1967 and 1968. But the spring sown area reached a record 95.5 million hectares, almost 7 million higher than in 1968. The total sown area of grains increased by 1 million hectares.

Soil moisture was generally favorable in the Ukraine and European parts of the USSR. However, severe windstorms and excessive cold caused a considerable amount of winterkill. About 14 million hectares or one out of every three sown had to be resown with spring crops--spring wheat, barley, and corn. A cold spring was unfavorable to winter crops that did survive and caused a lag of about 2 weeks in planting. Precipitation varied in different parts of the country. Heavy snowfalls in Western Siberia and Northern Kazakhstan improved soil moisture reserves in these areas. However, dry weather was reported in the North Caucasus and the Volga Vyatka regions which are important grain and sunflower producing areas. Harvesting was quite late compared with previous years, and was extended through November in parts of the Russian Soviet Federated Socialist Republic and the Ukraine.

The government reported grain harvest in 1969 of 160.5 million tons was 9 million tons below the 1968 level, but still the third largest on record. USDA estimates of usable grain 4/ for 1968 and 1969 are 144.4 and 132.4 million tons, respectively.

Wheat, both winter and spring, suffered because of poor weather in 1969. Total production of usable wheat was estimated at 65.2 million tons. The total wheat area declined to 65 million hectares, compared with 67 million hectares in both 1967 and 1968. The winter wheat area was 4 million hectares below the 19 million in 1968. Output dropped as a result of winterkill to an estimated 21 million tons. However, a record yield of winter wheat (21 centners per hectare) was reported for the Ukraine. Lower yields were reported in the North Caucasus and parts of the Lower Volga and Ural regions, which contributed to the overall reduction in the winter wheat output. The spring wheat area was increased by 2.5 million hectares, to about 51 million hectares, with production estimated at 46 million tons compared with 47 million in 1968.

Feed grain production--barley, oats, and corn--reached an estimated 44 million tons. This represented a higher share of total grain output than in recent years. As a replacement for damaged winter grain, the corn for grain area was expanded 47 percent to about 5 million hectares, and production amounted to about 9 million tons. The winter and spring barley area (spring barley is 95 percent of total barley) rose by a little more than 2 million hectares and total barley output reached an estimated 25 million tons, making up more than half of total feed grain output. Spring barley was a major replacement crop for winter grains last year. The expanded area more than offset reduced yields in the important Lower Volga area. The 1969 output of oats was about 10.0 million tons, up 300,000 tons from 1968. Expanded area of 500,000 hectares made up for reduced yields.

4/ Usable grain refers to USDA estimates, accounting for Soviet inclusion of excess moisture and foreign matter in grain production figures.

Rice production on a sown area of 313,000 hectares about equaled 1968's output of 1 million tons. High yields were reported in Uzbekistan. Rice imports have fluctuated between 250,000 and 400,000 tons since 1965, but the long-term trend points to greater self-sufficiency.

The 1969 production of sunflowerseed officially declined to 6.3 million tons from 6.7 million tons in 1968. Dry weather in the important areas of the Northern Caucasus, Lower Volga, and Kazakhstan largely caused the decline. Sunflower area was estimated at 4.9 million hectares as in 1968. A reduction in net export availabilities of sun oil has occurred in the past 2 years. And the estimated lower stock position suggests that exports will probably continue to decline in 1970.

Fiber crops also suffered from the cold spring in 1969, but flax for fiber increased to 460,000 tons. Flaxseed declined slightly in 1969. Seed cotton output declined to 5.7 million tons from 6.0 million in the previous year because of late sowing and harvesting delays in Uzbekistan, the major cotton producing region in the USSR. Although the cotton area of 2.5 million hectares was 65,000 hectares greater than in 1968, the average cotton yield of 22.4 centners per hectare was down 7.8 percent from last year and at the lowest level since 1964.

Sugar beet output for factory use in 1969 totaled 71 million tons, about 23 million tons below the record 1968 level. Sown area was reported as 3.4 million hectares compared with 3.6 million in 1968. Yields averaged about 209 centners per hectare, down 21.4 percent from 1968. The Ukraine, which usually produces about 60 percent of the Soviet Union's sugar beets, reported yields of 250 centners per hectare, or approximately 25 percent lower than the year before.

Sugar content of the 1969 beets was not expected to be any higher than in 1968 due to the cool weather the past summer. The USDA estimated the raw sugar output from the 1969 crop at about 7.6 million tons, well below the planned level of 9.7 million tons.

Gross output of potatoes, fruit, and vegetables was lower than in 1968. The late spring in parts of the southern Ukraine and the RSFSR contributed to this general downturn. Vegetable production was about 18 million tons, a slight decline from last year's 19 million tons. Potato production was 82.5 million tons. Because of the late spring, total fruit and berry output likely declined to about 9 million tons, which equaled the 1966-69 average.

NO IMPROVEMENT IN LIVESTOCK PRODUCTION

There was some reason for concern over the lack of progress in the livestock sector during 1969. Since 1960, growth rates for the sector have been consistently lower than those for crops, pointing to long-term weaknesses in Soviet livestock programs. Moreover, the sharp fluctuations in grain output and continued expansion of grain exports could make it difficult to improve feed programs in the future.

Yearend inventories indicated a slight decrease for cattle and cows. There was a steep drop in sheep and goat numbers--due to severe winter conditions in late 1968 and early 1969--especially in Kirgizia and Kazakhstan. A sharp upturn in hog numbers after a 3-year decline reflects measures taken in recent years to rebuild herds, check foot-and-mouth disease, and meet organizational and price changes.

A lesser part of the 3-percent decline in agricultural production was attributable to the downturn in the livestock sector. Total meat production remained at the 1968 level. Cattle numbers of 95.0 million were below the 95.7 million of the previous year, although average live weight per animal did increase 18 kilograms over 1968. Sheep and goat numbers dropped 7 percent to 136.3 million, the lowest level since 1966. Average live weight reportedly increased about 2 kilograms. Hog numbers increased 7.1 million over the 1968 census of 49 million and average live weight was up 7 kilograms. In response to bonus incentives, poultry numbers increased moderately to an estimated 550 million compared with 1968's 544 million.

The reported increases in average live weights of livestock in the past year should be viewed as a small step forward in feeding efficiency. Limited data, however, still suggest that feed inputs per animal are well below the high U.S. levels. Costs of production have been increasing the past 2 years. According to Soviet reports, it cost 16 rubles to produce 1 centner of milk in 1968, up 4 percent from the 1965-68 average.

Meat production (carcass weight) was down in 1969 in some republics, but output for the country remained at the 11.6-million-ton level reached in 1968. Government purchases amounted to 7.3 million tons, down 100,000 tons from the previous year. Pork purchases increased, but mutton and beef declined. Lower commercial sales were reported in the Ukraine, RSFSR, and Kazakhstan, and total sales for the year were only 96 percent of the 1968 level. This decline suggests that increased sales at higher prices were made in collective farm markets.

Milk production declined to 80.6 million tons--reflecting the drop in cow numbers during the year. Egg output increased to 37 billion, up 4 percent over 1968. The continued uptrend in egg output since 1966 implies some improvement in feeding efficiency and larger commercial production. Wool production declined in 1969 to 390,000 tons, reflecting the heavy loss of sheep during the past winter.

AGRICULTURAL POLICY AND THE THIRD COLLECTIVE FARM CONGRESS

In Soviet agriculture great emphasis has been placed on achieving increased productivity per hectare of arable land and reducing operational costs on state farms. Cost accounting, a type of financial autonomy through farm investments from farm profits, was introduced in 1967 on a few experimental state farms. Approximately 800 of the 13,300 state farms were using the system in 1968 and profitability on half of these farms in January 1969 was from 20 to 40 percent higher than in 1966. There are still problems with the slow progress in construction and land improvement on state farms. Problems related to

profits and increased costs continue to plague management, and directors of state farms have been criticized for using farm profits for labor bonuses rather than for capital investments.

Early in 1969, significant price increases were announced for cotton and poultry. These incentives were partly responsible for the reported 3-percent increase in cotton area and the 10-percent increase in poultry numbers on collective and state farms over the midyear 1968 level. Due to delivery problems and local shortages, an upward adjustment was placed on vegetables and fruits in state markets in June to stabilize the market.

In September 1969 a new Ministry of State Purchasing was formed. This agency will set and collect payments for government purchases and determine quality standards.

In December, elected representatives of the USSR's collective farms adopted a new collective farm charter. The charter, drafted by the CPSU Central Committee in April, had been reviewed and discussed by each collective farm. Although numerous proposals were made to amend the draft, the ratified document reflects few of them and remains a conservative model for managing the country's 36,000 collective farms.

Recent agricultural reforms, such as the guaranteed minimum monthly wage, the creation of larger incentives for above-plan performance, and the introduction of a unified system of social security benefits, have been incorporated in the new charter. In addition, the 1969 charter sanctions private plot activity, inter-kolkhoz ventures, and auxiliary enterprises on collective farms. Another recent area of reform is the proposed tie-in of farm wages with labor productivity.

The private sector presently contributes about 30 percent of gross agricultural output in the USSR. The new charter basically affirms the important role of private plots in the production of livestock and livestock products on the collectives although they are dependent on grain from the socialized sector. On only 3 percent of total sown area, private farms produce roughly 40 percent of the eggs, 47 percent of the potatoes, 20 percent of the meat, and 13 percent of the vegetables in the USSR. The charter states that each private plot may be no larger than half a hectare--smaller than allowed under the 1935 charter but larger than the present size on some farms.

Private plots are located on the collective farmland and title is held by the collective. Some rent is collected in amounts determined by the management committee of each collective farm. Quantities of livestock allotted to private households are left up to individual collectives in the new charter, although the number of domestic animals such as cows, bees, rabbits, and poultry have been reduced from previous levels. Like under the 1935 model, the collective farm management helps private farmers acquire feed for livestock by paying them in kind. The 1969 charter also permits the sale of feed to members. This has caused some criticism since it may raise the cost of raising livestock on private plots, depending on local farm conditions.

A major controversy developed over the type of farm labor organization to be used by the collectives. Some think the link, a small, well-equipped team of

6 to 12 men assigned to one plot or crop over a relatively long time, is superior to brigades, consisting of 40 to 60 workers headed by a leader or foreman. The management and control over large brigades has been a frequent source of complaint. Nevertheless, the charter is vague and leaves the organizational unit up to the collectives, probably because some officials consider links to be too independent and thus an idealogical threat. Reformists are looking for other ways to improve labor efficiency, but no radical departures from the old work system are being made.

Ignored were moves to create a national collective union, or a large association of collective farms to oversee construction projects and manage agro-industrial enterprises. Instead, weak collective "councils" will be elected locally, offering no possible threat to the Ministry of Agriculture's authority over the collective farm structure.

The new charter then is limited in scope and construction. It allows authorities to control the pace of change which is occurring in the collective farm sector. Nevertheless, it incorporates several major policy changes made on the collectives since the last formal charter appeared in 1935.

LAGS IN INVESTMENT

Realized returns from the accelerated emphasis on agricultural capital inputs during the 1960's have been slower than originally anticipated. Recognizing this shortcoming, Soviet leaders, without reducing emphasis, have introduced more moderate goals for 1970 in areas where progress is slow.

Productive investment (excluding buildings for social purposes) in the agricultural sector has been growing at an annual rate of about 11 percent since 1960. The announced plan for total agricultural productive investment in 1970 is 14.7 billion rubles, a 10.7-percent increase over 1969's estimated 13.3 billion rubles. This implies interest in maintaining a favorable investment posture in agriculture, although no significant increases are planned for working capital inputs, except in mineral fertilizer.

Over half of productive agricultural investment is in construction, which was hampered by high costs of materials and low labor productivity in 1969. On collective farms, a capital investment fund has been made mandatory by the new charter. Although no specific amount is mentioned, the fund takes priority over the incentive fund. N. Baybakov, Chairman of the Central Planning Organization, Gosplan, announced in his December Plenum speech, "in 1970 85 percent of the overall growth in national income should be achieved through an increase in labor productivity."

The goals for deliveries of tractors, combines and other machinery to agriculture were nearly reached, just as they were in the 3 previous years of the 5-year plan. In 1969 grain combine deliveries of 92,000 amounted to 92 percent of plan; tractor deliveries of 303,000 were 99 percent of plan. The plan for the delivery of 155,000 trucks presumably was not met, and this added to the transportation bottlenecks, made the late, wet harvest more difficult. Under 1970 plans, 312,000 tractors and 157,000 trucks are to be delivered, incorporating only modest improvements over 1969 plans.

Fertilizer deliveries in 1969 were fractionally more than planned deveries of 38.5 million tons. The plan for 1970 is expected to reach 46 llion tons. This is a revision from the original 55 million tons, but repreits an important increase of 20 percent over 1969. Mineral fertilizers will applied to potatoes, vegetables, and industrial crops as well as grains. e Volga area has been specified as the major beneficiary of the proposed inease.

CONSUMPTION WEAK IN 1969

The upward trend in high-protein foods, characteristic of the Soviet diet nce 1965, suffered a setback in 1969. Consumption levels were adequate, but pplies to city markets were irregular. There was a shortage of fresh meat, ultry, and meat products in major cities of the USSR. Many of these shortmings can be attributed to weaknesses in the transportation and marketing stems, but the major problem is still one of production.

Vegetable and fruit production also declined slightly from 1968. Consumpon of vegetables has declined 2 consecutive years, partly due to weather mage and partly to the decision to sell vegetables on kolkhoz markets where ices more nearly reflect effective demand rather than to state stores where ices are fixed at lower levels. Transportation from rural areas to procurent points is another reason for the weak supply position of fruits and getables. Potato consumption has been declining since 1965 due to better pplies of quality foods, meat, eggs, and milk, in the diet. However, cereals d starches contributed 54 percent of average caloric intake per day in 1967 d was estimated at about that level in 1969. The number of calories supplied grains and potatoes is about 20 percent greater for collective farmers than r other workers.

Vegetable oil crops have recently reached a production level consistent th "self-sufficiency" in Soviet terms. This suggests that consumption is dequate to meet an average worker's daily caloric needs. Due to higher oil ntent of seeds and better extraction methods, the production of vegetable ls, especially sunflowerseed oil, has increased greatly in the past 3 years. nsumption, however, declined after 1966 due to a government policy to inease exports. Surplus butter has substituted for vegetable oils. Production f butter amounted to 1.1 million tons in 1968. Per capita consumption in 1968 robably rose to about 4.5 kilograms. A reduction in butter stocks at the end f 1969 due to increased consumption may be one cause for significant increases f butter imports in 1970. Prices during the year were stabilized slightly bew the 1968 level.

Per capita Soviet meat and poultry consumption (which includes lard) eached 48 kilograms in 1968 but fell to 46 kilograms in 1969. Per capita meat onsumption is still only about half that of the United States. As a result of he decline in meat availability, poultry and meat prices fluctuated in 1969. rospects are not good in 1970 for reaching the planned meat consumption of 51 ilograms per capita.

Several factors have contributed to the present lag in livestock products onsumption. Livestock and poultry holdings on the household plots, which

contribute about 40 percent of meat and milk output, declined during 2 consecutive years. Slow progress in collective and state farm feed programs (although feed supplies are generally improving), and lingering effects of foot-and-mouth disease, are also factors. Ineffective marketing and poor refrigeration for storage of meat and milk products remained important factors in distribution and consumption problems.

Table 2.--USSR: Per capita consumption of selected food products, 1960, 1965, 1966-69

Commodity	1960	1965	1966	1967	1968	1969
	Kilograms					
Meat and fat	40	41	44	46	48	1/46
Milk and milk products	240	251	260	274	285	288
Eggs (numbers)	118	124	132	138	144	149
Fish and fish products	9.9	12.6	12.9	13.2	14.3	n.a.
Sugar	28.0	34.2	35.3	36.7	37.4	n.a.
Vegetable oil	5.3	7.1	6.3	6.5	6.5	n.a.
Potatoes	143	142	135	131	131	n.a.

1/ Estimated from N. Baybakov's Supreme Soviet Speech.

n.a. = not available.

Sources: Narodnoye khozyaystvo SSSR v, 1967, 1968.

AGRICULTURAL TRADE STILL STRONG

Agricultural trade in the 1960's became increasingly important to the Soviet Union as a source of hard currency earnings. Commodity trade not only increased, but select commodities--sunflowerseed, oil, and cotton--are now competing with U.S. products. While a substantial share of the Soviet grain trade is still directed to Eastern Europe, grain has also appeared in other commercial markets of the world in recent years. The downturn in output of most commodities in 1969 will probably depress trade levels in 1970.

Agriculture's share of total exports was 15 percent and its share of total imports about 18 percent in 1968. The USSR holds a net export position in grains, cotton, sunflower oil, and fresh-frozen meat. This position was held during 1969 largely due to record government purchases during 1968 for domestic stocks and exports. Although total exports are expected to decline in 1970, the Soviets can probably maintain a net export position in these products.

In June 1966, the Soviet Union contracted to buy 9 million tons of wheat from Canada over the next 3 years. In June 1969, about 3.5 million tons of wheat remained to be bought. After a conspicuous delay, the USSR agreed in December to purchase the remaining wheat, 2 million tons of which will be delivered by December 1970. Part of this wheat has already been assigned for

xport to Cuba, and part could go to the Far Eastern regions of the USSR or to eet other export commitments in 1970.

The need to accumulate wheat stocks is probably strong at this time. In 968, 49 million tons of wheat were purchased by the state, or 10 million tons ore than the domestic wheat requirement. In 1969, an estimated 37 million ons were purchased, about equal to the domestic needs.

Wheat trade in hard currency markets will probably be reduced in 1970. ommitments to Czechoslovakia and East Germany for 1970 have already been set t about 2.5 million tons, but it is possible that feed grains could be substituted for some of this wheat.

Greatly increased government purchases of cotton, sugar, and vegetable oil ince 1964 have permitted the Soviets to make impressive gains in exports of hese commodities up and through 1969. Sugar was exported primarily to the udan, Eastern Europe, and the Middle East in 1968. Imports of raw sugar from uba have contributed to the Soviet export position of refined sugar. Under erms of the 6-year Soviet-Cuban agreement signed in 1964, the Soviets would urchase 5 million tons of raw sugar from Cuba during the years 1968 through 970. Purchases have been considerably less, but if Cuba approaches the 10 illion-ton goal this year, it is possible that the 5 million-ton delivery ould be met. Cotton exports exceeded 500,000 tons in 1968.and 1969, but will robably drop in 1970 due to lower quality and reduced production. Principal arkets are Eastern Europe, Japan, and Great Britain.

Exports of vegetable oils, 75 percent of which is sun oil, declined by bout 100,000 tons in 1969. Oil exports could decrease further in 1970 due to he 6-percent drop in sunflowerseed production. Western markets for sun oil nclude the Netherlands, Italy, and West Germany. Sunflowerseed exports are onfined mainly to East Germany, Czechoslovakia, and Japan.

Shortages of meat should cause a rise in poultry and beef imports during he first half of 1970, primarily from France, New Zealand, and Australia. The oviets have contracted with Australia for the purchase of 30,000 tons of beef uarters and mutton for delivery in May. This reflects the weakened position f both internal and East European suppliers. Imports will probably serve as a top-gap measure until the domestic production improves.

While the share of Eastern Europe in USSR's total agricultural trade has een increasing slowly since 1966, the increased trade with such Western markets as Great Britain, France, and Japan has been more dramatic, reflecting the esire for hard, negotiable currencies.

Agricultural trade with the less developed countries and China has been ecreasing since 1966. U.S. agricultural exports to the USSR amounted to $5.3 illion in 1968--primarily hides and skins. Soviet exports to the United tates were $2.2 million--mainly cotton linters and bristles. In 1969 U.S. exorts increased to $11.6 million.

OUTLOOK

Last year's weak agricultural performance is expected to affect 1970 trade in certain critical areas. A prospective decrease in cotton exports would break the uptrend evident since 1967. The low sugar beet output in 1969 is expected to reduce refined sugar production to about 7.6 million tons, well below the planned level of 9.7 million tons. This decrease could reduce the level of exports in 1970. Raw sugar imports from Cuba will probably increase.

Vegetable oil production in 1969 was about 200,000 tons below that of 1968. Export supplies of sunflower oil in 1969 were probably lower than in 1968. Exports of sun oil in 1970 are expected to continue at a reduced level.

In 1970, the Soviet Union will complete the current 5-year plan (1966-70) and lay the groundwork for the next 5 years. The planned 1966-70 growth rates for agricultural production, though more realistic than Khrushchevian aims, did not fully take into account the rigidities of economic institutions and the vagaries of weather. Even with increased investment in agriculture, the final results of the 5-year plan showed a sluggish response. And output did not match increased consumption demands of a growing population.

Grain is still the foremost area of concern. On a total area of 125 million hectares, output in 1970 is planned to reach a record 174.5 million tons. Planned purchases of grain are not expected to exceed the 1968 level of about 70 million tons, but should be enough to insure adequate stocks, and to at least maintain the past level of exports.

Procurement plans for 1970, except grain, sugar beets, and wool, are at record levels. The 9.8-percent planned increase in cotton will raise procurements to 6.3 million tons and could improve the Soviet export position in 1971. Sunflowerseed procurements are planned to be slightly above the 1968 level--5.2 million tons. Meat production (including fats and offals) is planned to reach 12.1 million tons. Higher planned input levels of mineral fertilizer (46 million tons), representing a 20-percent increase over 1969, could improve crop performance in 1970. Plans for machinery deliveries are only marginally above those for 1969. Effects of land improvement and increased machinery inputs will probably not appear until the next 5-year period.

Sowing of 1970 winter grains started slowly. Lack of soil moisture in Moldavia, the Southwestern Ukraine, and in Krasnodar Kray slowed germination and growth in the fall months. The weather has been quite mild, however, in much of the European part of the USSR, and January snows have improved the snow cover in parts of the Ukraine.

EASTERN EUROPE

AGRICULTURAL OUTPUT DOWN IN 1969

Agricultural output in Eastern Europe last year declined about 1 percent in the USDA index--the first decline since 1962 (table 1). Summer drought on potatoes, sugar beets, and other crops in the northern countries--Czechoslovakia, East Germany, and Poland--was mainly responsible. The southern countries--Bulgaria, Hungary, Romania, and Yugoslavia--recovered in 1969 from the drought-reduced 1968 harvests, but better results in crop production there did not offset lower crops in the north. Lower livestock inventories at the start of 1969 in most countries retarded growth in livestock product output.

Despite the decline in aggregate production in 1969, output remained on the generally higher plateau achieved since 1965 and was about 18 percent higher than the 1961-65 average in the USDA index. Yugoslavia and Hungary achieved record levels of production, growing faster than planned. Bulgaria and Romania partially recovered from the reduced 1968 level, but did not achieve planned growth and remained below 1966 and 1967 levels. Output declined moderately in Czechoslovakia and Poland and sharply in East Germany.

Commodities registering the largest increases in 1969 were fruit, corn, sunflowerseed, and barley (table 12). Slight increases were made for wheat, milk, and eggs. Rapeseed production dropped to less than half the level of the previous year. Major declines were noted for sugar beets, potatoes, tobacco, and rye; wool, vegetable, and meat output declined slightly.

DROUGHT AFFECTS FEED SUPPLIES IN NORTHERN COUNTRIES

Poland, East Germany, and Czechoslovakia experienced hot, dry weather throughout July and in the first half of August. This led to widespread problems for the agricultural sector, especially animal husbandry. Reduced production of potatoes and forage crops, combined with increased livestock inventories in Poland and East Germany, created a larger gap between feed supplies and needs. The impact was less severe in Czechoslovakia, where livestock numbers were low compared with recent years, although the poor potato crop was a deterrent to herd rebuilding programs.

A major reduction in feed supplies occurred as the drought cut potato production. Output declined from 70 million tons in 1968 to an estimated 59 million tons in 1969. Yields suffered, but reduced area (table 11)--a long-term trend--accentuated the drop. Although important for human consumption, about half of the potatoes in these countries go into livestock feed, accounting for roughly one-fifth of the total feed units in some years. Various measures were taken to conserve supplies, such as restricting exports

and industrial use, and consumers were assured adequate quantities. The bulk of the loss was expected to be felt by livestock feeders.

Grain supplies were affected less severely by the drought. Total production equaled the record 1968 level of 33.4 million tons. Rye barely held the leading position, as output declined about 4 percent to 10.8 million tons. Wheat was a record 10.4 million tons. Barley production also was a record. Rye and wheat, as well as feed grains, are used extensively for livestock feeding in these countries. Roughly half of grain supplies are used for feed, accounting for more than one-fourth of total feed units in most years.

About half of livestock feed of the northern countries is derived from pasture and from hay, straw, green forage, feed roots, and other forage crops. These crops were severely affected by the drought. Pastures dried up and sowing of catch crops was hindered by lack of moisture. But improved rainfall after mid-August and a long fall enabled longer grazing of pastures and development of catch crops.

In Poland, where private farms still predominate, the government offered direct assistance to farmers to counteract the drought. Credit repayments were postponed 12 months and additional credits were offered for seeds and fertilizer. Government sales of feed concentrates were planned to increase to 4 million tons in 1969/70 compared with 3.5 million tons in 1968/69 (about three-fifths was purchased by private farmers). Planned government purchases of grain from farms were reduced by 350,000 tons and additional imports of grain, oil meal, fish meal, and soybeans were promised.

Through increased imports of grains and other feedstuffs, the northern countries expect supplies to be sufficient to maintain livestock herds at relatively constant levels. Imports of 5.7 million tons of grain in 1968 included 3.5 million tons of wheat and 1.9 million tons of feed grains (table 3). Grain imports likely declined in 1969 following the record 1968 harvest. Due to smaller feed availabilities from the 1969 crops, imports are expected to exceed 1968 purchases by as much as a half-million tons. Poland and East Germany probably will increase their imports sharply.

The Soviet Union has been the major supplier of grain to these countries, providing about 60 percent of the total and more than 80 percent of the wheat in 1968. The United States supplied about 15 percent of the total, but almost half of the feed grains. Poland, however, purchased 60 percent of its grain from western sources and only 40 percent from the USSR in 1968. France supplied about 30 percent of Polish grain imports, both barley and wheat, and continued to sell grain to Poland in 1969. In late 1969, Poland also extended its agreement with Canada to purchase 400,000 tons of wheat and barley by mid-1971. In January 1970, Czechoslovakia announced that the USSR would supply 1 million tons of grain, largely wheat, by midsummer. The USSR agreed to sell 1.5 million tons of grain to East Germany during 1970, including 1.2 million tons during the first half year. Purchases of EC (European Community) feed wheat at relatively low prices reportedly were contracted by the northern countries during 1969. During 1969, the United States sold 575,000 tons of feed grains, excluding transshipments, valued at $30 million, to the northern countries of Eastern Europe. East Germany and Poland were the principal markets.

Table 3.--Eastern Europe: Imports of grains and selected feedstuffs by the northern countries, average 1961-65, annual 1966-68

Item	1961-65 average	1966	1967	1968 1/
	1,000 tons			
Wheat				
Czechoslovakia	1,142	1,032	1,205	1,371
East Germany	1,208	1,350	1,184	1,075
Poland	1,701	1,567	1,353	1,068
Total	4,051	3,949	3,742	3,514
Feed grains				
Czechoslovakia	542	698	396	400
East Germany	476	529	583	661
Poland	752	444	694	880
Total	1,770	1,671	1,673	1,941
Total grains 2/				
Czechoslovakia	1,865	1,876	1,847	1,827
East Germany	1,930	1,998	1,817	1,783
Poland	2,713	2,148	2,112	2,071
Total	6,508	6,022	5,776	5,681
Oilmeal and cake				
Czechoslovakia	114	205	250	260
East Germany	129	236	345	379
Poland 3/	116	184	216	299
Total	359	625	811	938
Fish meal				
Czechoslovakia	41	67	75	65
East Germany	49	95	80	97
Poland	35	67	85	108
Total	125	229	240	270

1/ Preliminary.
2/ Includes wheat, feed grains, rye, and rice.
3/ Includes some milling byproducts.

Oil cake and meal imports by the northern countries have grown steadily, climbing from 543,000 tons in 1965 to an estimated 938,000 tons in 1968. The United States supplied 107,000 tons (primarily to Poland), valued at $10.2 million. U.S. sales during 1969 slipped to $8.5 million. Total imports of oil cake and meal during 1970 by the northern countries probably will continue to grow and should exceed 1 million tons.

Increased feed requirements resulting from the 1969 drought in the northern countries of Eastern Europe will have a major impact on import costs. Grain and other livestock feeds occupy a leading position in the agricultural imports of these countries. 5/

GOOD GRAIN CROPS IN SOUTHERN COUNTRIES

Total grain production in the southern countries--Bulgaria, Hungary, Romania, and Yugoslavia--in 1969 was an estimated 41.7 million tons, slightly below the 1966 record and 9 percent higher than the drought-reduced 1968 crop. Production was more than one-fourth above the 1961-65 average. Compared with 1968, wheat output increase only 2 percent, and was 10 percent less than the 1967 record; corn output increased 14 percent and equaled the 1966 record. Corn and wheat accounted for 53 and 36 percent, respectively, of the estimated 1969 output of grain in the southern countries.

Although total performance was clearly better than in 1968, the principal improvements were in Yugoslavia and Hungary. Wheat production reached record levels in both countries and corn production was a record in Hungary and near-record in Yugoslavia. Grain output was higher in Bulgaria and Romania, but well below 1966 and 1967 levels.

Grains for the 1969 harvest entered the winter in good condition and overwintered normally, except in Romania where winter damage reduced the wheat area. Total grain area remained about the same as in 1968. Spring planting was delayed by cold weather. The summer was cool and rainy except in Bulgaria, where dry weather set in after June. Rainfall was unusually heavy in Romania.

Improved levels of grain production boosted livestock feed supplies. Grains play a more important role and potatoes a relatively minor one in the feed balances of these countries. Pasturing was delayed in the spring, but subsequent favorable precipitation, except in Bulgaria, provided additional benefits as pastures were lush and hay crops yielded well.

5/ Most East European countries do not publish value data on commodity trade. Estimated values are published by FAO in its Trade Yearbook. The most recent estimates are for 1967. In that year, total grain imports by the northern countries were valued at an estimated $419 million. Wheat and feed grains accounted for $279 million and $100 million, respectively. Imports of oil cake and meal were valued at an estimated $77 million.

Human consumption of grain in the southern countries increased through the mid-1960's, but has begun to decline. Average consumption estimated at about 180 kilograms per capita in 1967 was almost triple the U.S. level. Recent declines may offset population growth of about 0.8 percent per year, permitting future increases in domestic supplies to be used for livestock feeding. Some countries are using larger quantities of wheat for livestock feed. For example, Hungary increased feed wheat production from about 100,000 tons in 1965 to more than 600,000 tons in 1969.

The better 1969 grain harvest should extend the uptrend of grain exports and downtrend of imports in the southern countries which developed during the 1960's (table 4). During 1961-65, the southern region was an annual net importer of more than 600,000 tons of grain, primarily wheat. A net export position--reaching about 3.5 million tons in 1967--has been maintained since 1965. Net exports declined in 1968 and 1969 as a result of the poor 1968 harvest. The better 1969 crop should boost net exports to more than 2.5 million tons--about two-thirds corn and one-third wheat. Few imports are anticipated, except about 100,000 tons of rice.

Yugoslavia and Hungary made especially abrupt shifts in grain trade in 1969. Yugoslavia's wheat imports, which had been averaging almost 1 million tons during the first half of the 1960's, were discontinued in 1968 and the 1969 crop provided the first surplus since World War II. A large crop and lower internal prices were expected to boost corn exports. A corn export fund to counter the gap between world prices and government-guaranteed prices also was proposed. Hungary imported nearly 500,000 tons of grain--much of it feed wheat--during 1968, but the 1969 crop produced a surplus of about 700,000 tons, most of which has been exported. Exports by Romania and Bulgaria may be less than in recent years.

LIVESTOCK PRODUCT SHORTAGES

Livestock production in Eastern Europe in 1969 generally showed the least annual growth since the reverses of 1963. Output of most products, however, was well above the 1961-65 average. The lack of growth, nevertheless, had a substantial effect on trade and consumption patterns.

Inventories of most major categories of livestock in Eastern Europe were lower at the start of 1969 than in either of the previous 2 years (table 13). For the region, hogs were down 3.3 percent from the previous year, and sheep and cattle numbers had declined 2.0 percent and 1.2 percent, respectively. Poultry numbers increased a slight 0.7 percent. Inventories of the major categories of livestock had generally declined in all countries, except Poland and East Germany (although hog numbers increased in Romania). Sharp declines of 13 percent in Hungary and Yugoslavia left hog inventories at close to the lowest levels of the 1960's. Hog inventories declined 8 percent in Bulgaria and Czechoslovakia. The major decline in cattle numbers was experienced by Yugoslavia with an 8-percent drop. Poultry numbers also were substantially lower in Bulgaria and Hungary.

Table 4.--Eastern Europe: Grain trade of the southern countries, average 1961-65, annual 1966-68

Item	Exports				Imports			
	1961-65 average	1966	1967	1968 1/	1961-65 average	1966	1967	1968 1/
	1,000 tons							
Wheat								
Bulgaria	11	400	534	200	175	315	13	233
Hungary	55	1	170	115	278	152	217	310
Romania	2/215	864	1,221	1,176	3/83	0	0	0
Yugoslavia	0	0	0	0	942	1,357	409	79
Total	281	1,265	1,925	1,491	1,478	1,824	639	622
Feed grains 4/								
Bulgaria	114	188	310	200	171	141	27	25
Hungary	54	43	20	19	336	96	10	149
Romania	2/924	413	1,086	375	0	0	0	0
Yugoslavia	132	445	899	424	71	1	0	3
Total	1,224	1,089	2,290	1,018	578	238	37	177
Total grains 5/								
Bulgaria	139	593	849	405	372	475	56	283
Hungary	111	52	198	134	639	289	302	477
Romania	1,160	1,303	2,339	1,551	113	30	32	30
Yugoslavia	132	445	899	424	1,037	1,385	419	110
Total	1,542	2,393	4,285	2,514	2,161	2,179	809	900

1/ Preliminary.
2/ Partially estimated.
3/ No sizable imports, except 401,000 tons in 1964.
4/ Exports are largely corn.
5/ Includes wheat, feed grains, rye, and rice.

Reductions in livestock inventories generally continued during 1969. Most countries have not reported the end-of-year livestock census numbers, but preliminary USDA estimates suggest that cattle inventories declined 2 percent and hog and sheep inventories declined about 1 percent. In contrast to 1968 when widespread drought played a major role in herd cutbacks, the declines in 1969 generally can be attributed to a strong demand for meat, which impeded the rebuilding of livestock herds. Insufficient profitability and lack of incentives on the small private plots also have been blamed for some liquidation of holdings. Disease problems contributed to losses in some countries.

Milk production was the brightest spot in the livestock sector in 1969. Cow numbers held more stable than other categories of livestock, and improved feed supplies in several countries boosted milk yields. Milk output increased in most countries and was up an estimated 1 percent for the region (table 14). Relatively slow growth in butter output during the second half of the 1960's suggests increasing utilization of fresh milk and other milk products.

Egg production in the region also probably increased more than 1 percent, although lower poultry numbers in Bulgaria and Hungary reduced output there. A slight improvement in the rate of lay generally was noted.

Wool production declined in 1969 as a result of smaller sheep herds at the first of the year and losses from severe winter weather in the southern countries.

Meat output declined slightly in the region (table 5). 6/ Poultry meat output made slight growth, primarily at the expense of pork. Substantial increases in total meat production are estimated for Poland and East Germany, and slight gains for Hungary and Romania. The sharpest declines were incurred by Bulgaria and Yugoslavia, followed by Czechoslovakia.

The failure of most countries in 1969 to significantly increase output of meat made it difficult to meet consumer demands. The shortages required increased imports by some countries and led to reduced exports by others.

Per capita consumption of meat in the region in 1967 averaged about 47 kilograms (one-half the U.S. level), ranging from 28 kilograms in Yugoslavia to 73 kilograms in Czechoslovakia (table 6). Consumption of eggs ranged from 96 in Yugoslavia to 246 in Czechoslovakia (315 in the United States) and of milk and dairy products (excluding butter), from 105 kilograms in Hungary to 258 kilograms in Poland (161 kilograms in the United States). Consumption of livestock products generally increased and consumption of potatoes decreased in the 1960's. Grain consumption declined after the mid-1960's.

6/ Because of definitive differences in meat carcass weights among the various countries, the live weight data are shown in table 5 to provide greater comparability. The reported data on live weight usually include live animal exports in recognition of the importance of production for export in these countries.

Table 5.--Eastern Europe: Production of meat (live weight at slaughter), average 1961-65, annual 1966-69 1/

Item	Czecho-slovakia	East Germany	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries	Eastern Europe
	1,000 tons									
Beef and veal										
1961-65 average	425	414	809	1,648	141	258	358	425	1,182	2,830
1966	482	499	845	1,826	190	264	388	453	1,295	3,121
1967	528	539	968	2,035	196	284	427	504	1,411	3,446
1968	586	559	1,050	2,195	217	306	481	572	1,576	3,771
1969 2/	554	586	1,100	2,240	196	343	481	489	1,509	3,749
Pork										
1961-65 average	607	852	1,555	3,014	219	656	406	637	1,918	4,932
1966	642	1,022	1,709	3,373	262	694	501	619	2,076	5,449
1967	647	1,052	1,687	3,386	261	655	541	642	2,099	5,485
1968	688	1,093	1,651	3,432	285	750	559	683	2,277	5,709
1969 2/	655	1,110	1,720	3,485	257	709	558	635	2,159	5,644
Poultry										
1961-65 average	71	86	124	281	48	183	95	89	415	696
1966	79	91	159	329	60	211	107	119	497	826
1967	91	96	166	353	76	228	125	129	558	911
1968	112	102	178	392	78	231	151	143	603	995
1969 2/	119	108	185	412	71	250	166	147	634	1,046
Total meat 3/										
1961-65 average	1,148	1,410	2,568	5,126	541	1,137	982	1,268	3,928	9,054
1966	1,239	1,661	2,784	5,684	685	1,207	1,128	1,294	4,314	9,998
1967	1,302	1,731	2,891	5,924	715	1,211	1,237	1,388	4,551	10,475
1968	1,418	1,798	2,962	6,178	768	1,332	1,354	1,530	4,984	11,162
1969 2/	1,360	1,848	3,095	6,303	693	1,348	1,364	1,390	4,795	11,098

1/ Including live animal exports; does not include changes in live weight of herds. 2/ Preliminary. 3/ Including poultry.

Table 6.--Eastern Europe: Consumption of major categories of foodstuffs, annual 1960, 1965-68

Item	Northern countries			Southern countries			
	Czecho-slovakia	East Germany	Poland	Bulgaria	Hungary	Romania	Yugo-slavia
	Kilograms						
Grain 1/							
1960	123	102	147	199	136	n.a.	186
1965	127	100	143	203	139	n.a.	194
1966	124	101	139	208	135	n.a.	191
1967	120	99	138	196	134	n.a.	187
1968	119	97	135	n.a.	132	n.a.	n.a.
Potatoes							
1960	100	174	223	n.a.	98	n.a.	70
1965	93	156	215	n.a.	84	n.a.	63
1966	111	156	211	n.a.	85	n.a.	65
1967	120	156	207	n.a.	85	n.a.	66
1968	121	150	201	n.a.	80	n.a.	n.a.
Vegetable oil 2/							
1960	7.7	12.5	3.5	n.a.	1.3	n.a.	3.2
1965	7.8	14.6	5.7	n.a.	2.0	n.a.	6.4
1966	8.1	14.4	5.6	n.a.	2.0	n.a.	6.8
1967	8.2	14.0	5.5	n.a.	2.0	n.a.	7.1
1968	8.4	13.8	5.5	n.a.	2.2	n.a.	n.a.
Meat 3/							
1960	56.8	55.0	42.5	29.1	47.6	n.a.	26.4
1965	61.7	58.7	49.2	39.6	51.6	n.a.	26.7
1966	62.0	60.1	51.0	42.4	50.0	n.a.	26.1
1967	62.9	61.4	52.3	43.4	51.6	n.a.	28.3
1968	68.4	63.0	52.2	n.a.	53.8	n.a.	n.a.
Milk 4/							
1960	173	5/97	234	95	114	n.a.	5/80
1965	180	5/97	240	107	97	n.a.	5/70
1966	184	5/99	254	116	101	n.a.	5/76
1967	191	5/100	258	122	105	n.a.	5/79
1968	200	5/102	261	n.a.	111	n.a.	n.a.

1/ In terms of milled grain; converted at 75 percent when expressed in terms of whole grain in official country data; milled rice is included.
2/ Generally includes margarine and shortening at product weight.
3/ Generally includes poultry and meat products, but excludes fish and fats.
4/ Excludes butter, but includes other dairy products in terms of whole milk.
5/ Fresh milk only.

The sharpest jump in meat consumption in the latter part of the 1960's occurred in the major meat importing country--Czechoslovakia. In particular, strong income gains in 1968 and 1969 led to increased demand for livestock products. Per capita consumption of meat increased 5.5 kilograms, or 9 percent in 1968. Despite wage controls, estimates suggest that per capita consumption could have increased more than 10 percent in 1969 if supplies permitted. Inadequate supplies, however, held consumption growth to 2 or 3 percent. Estimated demand for meat in 1969 was almost 200,000 tons greater than in 1967, but meat production had not caught up with demands in 1968 and declined in 1969. Acute shortages of eggs also were reported during 1969. At the same time that needs for meat and eggs were increased in Czechoslovakia, reduced availabilities in other Communist countries--the traditional suppliers--put a brake on their exports to Czechoslovakia. As a result, the Czechoslovak Government announced plans in 1969 to step up imports of livestock products from non-Communist countries.

Gaps between supply and demand of meat during 1969 in most East European countries exerted pressure to increase retail prices. The central price-fixing authorities apparently weathered this pressure in most countries. For example, in Czechoslovakia basic meat cuts were not affected by a round of retail price increases in May. Even a reduction in retail poultry prices was announced in Bulgaria. On the other hand, in the more market-oriented Yugoslav economy, continued increases of retail prices reportedly made purchases difficult for the average consumer.

The brunt of the meat shortages probably was felt by the consumer, since meat exports continued to be an important source of foreign exchange and the leading agricultural export of the region. 7/ Growth of fresh meat exports leveled off in 1968, largely due to reduced beef sales by Yugoslavia--the leading meat exporter in the region (table 7). Decreased exports largely were the result of high import duties imposed by Yugoslavia's major market--the EC. Through October 1969, exports of Yugoslav beef and live cattle continued below 1968 levels, although this decline was attributed to lower cattle numbers as well as to the EC barriers. In February 1970, Yugoslavia and the EC concluded a 3-year trade agreement, to be effective May 1, granting improved access to the EC market for Yugoslav baby beef.

Difficult access to the EC market was also faced by other countries in the region. The impact has been much less marked than in the case of Yugoslavia, reflecting the greater control over export prices, the relatively greater importance of intraregional and Soviet trade, and some success in locating new markets, particularly for poultry. For Hungary, the second leading exporter of fresh meats, and the leading exporter of slaughter cattle in the area, trade continued well in 1969. Poultry exports increased slightly and slaughter cattle exports reportedly jumped more than 40 percent. But to counter consume

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7/ Based on the most recent FAO estimates (with allowance for sales by East Germany to West Germany). In 1967, exports of fresh, chilled, or frozen meat by the region were valued at $329 million (compared with $166 million of imports). The total value of exports of meat, meat products, and live animals was almost $700 million.

Trade in meat, by type of meat, average 1961-65, annual 1966-68

Item	Czecho-slovakia	East Germany 1/	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries	Eastern Europe
	1,000 tons									
Total meat										
Exports										
1961-65 average	7.6	27.1	71.8	106.5	17.4	65.1	18.4	98.2	199.1	305.6
1966	8.0	43.6	49.8	101.4	30.0	86.6	31.1	116.0	263.7	365.1
1967	17.2	47.9	62.1	127.2	38.2	90.1	56.8	107.3	292.4	419.6
1968 2/	15.0	50.0	60.8	125.8	40.0	95.0	60.0	97.4	292.4	418.2
Imports										
1961-65 average	82.1	93.2	25.0	200.3	7.3	31.3	1.7	1.1	41.4	241.7
1966	89.0	63.5	49.4	201.9	8.5	31.0	0.3	9.7	49.5	251.4
1967	88.2	54.5	40.5	183.2	25.6	58.2	0.4	32.9	117.1	300.3
1968 2/	88.8	50.0	75.2	214.0	5.0	18.1	---	5.6	28.7	242.7
Poultry 3/										
Exports										
1961-65 average	1.6	n.a.	16.0	4/17.6	7.6	28.9	n.a.	2.7	4/39.2	4/56.8
1966	3.3	n.a.	18.8	4/22.1	10.1	34.5	n.a.	1.0	4/45.6	4/67.7
1967	3.7	n.a.	17.3	4/21.0	17.0	39.1	n.a.	1.9	4/58.0	4/79.0
1968 2/	3.7	n.a.	18.0	4/21.7	20.0	47.3	n.a.	1.1	4/68.4	4/90.1
Imports										
1961-65 average	8.2	n.a.	---	4/8.2	0.1	0.3	n.a.	0.1	4/0.5	4/8.7
1966	8.7	n.a.	---	4/8.7	---	---	n.a.	0.5	4/0.5	4/9.2
1967	7.6	n.a.	---	4/7.6	---	---	n.a.	0.2	4/0.2	4/7.8
1968 2/	5.8	n.a.	---	4/5.8	---	---	n.a.	0.1	4/0.1	4/5.9

1/ Including "interzonal" trade with West Germany.
2/ Preliminary.
3/ Included in total meat.
4/ Excluding East Germany and Romania.

pressures, the government in early 1970 announced that pork imports will be increased. Poland is the leading exporter of canned meats, followed by Yugoslavia, and both rely heavily on the U.S. market for hams. Both countries showed growing sales to the United States in 1969.

Along with the emphasis to export meat, the pressures to increase domesti consumption are expected to bring even greater emphasis on the livestock secto in the plans for 1971-75. Several of the countries took steps in 1969 to boos livestock production. In Poland, price increases on hogs took effect January 1, 1970. A reduced land tax also was promised in 1970 to farmers who increase beef sales. These measures were at least partly designed to prevent drought-induced slaughter in 1969. In East Germany, the lower-priced compulsory deliveries were abolished (although farms still refund to the government a portion of receipts to be used for general agricultural development). Bonus prices for sales above the contracted level in Czechoslovakia caused excessive slaughtering of herds. Further increases in the basic prices on hogs were proposed in 1969, but, in general, a price freeze has been applied in that country. The Hungarian Government announced in December the following price increases to be effective January 1, 1970: slaughter cattle--30 percent; slaughter hogs--10 percent; slaughter sheep--20 percent (but wool down 6.5 percent); and milk--5 percent. A new set of prices on livestock in Yugoslavia, announced in July to be effective January 1, 1970, resembles the prices established in 1965, but is guaranteed only for the higher grades of animals. Bulgaria previously established higher livestock prices in 1968. Prices apparently remained unchanged in Romania.

VEGETABLE DOWNTURN, BUT FRUIT HARVEST IS A RECORD

With the onset of drought in the northern countries and continuation of the cool, rainy summer in the southern countries, concern developed in Eastern Europe about the supply of other foodstuffs. For the region, vegetable output declined slightly from 1968 output of 10.8 million tons and potatoes dropped almost 15 percent from the record 78.3 million tons in 1968. All the northern countries experienced a decline, but the sharpest was in Romania. Romanian potato output dropped 40 percent and vegetable production declined 13 percent. Despite lower production, all governments acted to secure close-to-normal supplies and assured the urban citizenry that needs would be met. In Poland, for example, exports of potatoes were reduced and vegetable imports increased.

The fruit crop also was smaller in the north, but a bumper harvest was gathered in all southern countries except Bulgaria. For Eastern Europe, production (excluding grapes) reached 7.8 million tons--about one-fifth larger than in 1968. The grape harvest increased 6 percent to a record 4.6 million tons.

In the southern countries the record fruit crop, combined with good vegetable production (except in Romania), tended to boost exports. Bulgaria and Hungary are the region's leading exporters of fruits and vegetables; these commodities contribute more than one-fourth of Hungary's agricultural export earnings. In 1969, Hungarian exports of fresh fruit jumped 60 percent to a record 350,000 tons, including 250,000 tons of apples. Results in Bulgaria

were less impressive, although production of tomatoes--the leading "vegetable" for export--grew 5 percent.

The region's wine exports also have climbed steadily, reaching 3.4 million hectoliters in 1967 and more in 1968. Bulgaria exports roughly half of the wine, followed by Hungary. Hungarian wine exports jumped one-fourth in 1969.

Despite the importance of fresh and processed fruits and vegetables in East European trade, they are largely exchanged within the Communist group and contribute little hard currency. The USSR, East Germany, and Czechoslovakia are the major buyers. Some markets have been developed in Western Europe, particularly in West Germany and the U.K.

REDUCED EXPORT AVAILABILITIES OF INDUSTRIAL CROPS

Production of oilseeds, sugar beets, and tobacco declined sharply in Eastern Europe in 1969. The declines in oilseeds and sugar beets were limited to the northern countries; output in the southern countries increased.

Total oilseed output in Eastern Europe declined 16 percent to an estimated 7.35 million tons (table 12). However, production of sunflowerseed--the major oilseed in the southern countries--jumped 11 percent to a record 1.76 million tons. The main boost came from higher yields, although area continued to expand. Exports of sunflowerseed and oil from the southern countries increased in 1968, continuing the trend since 1965. Estimated exports of 204,000 tons of sunflowerseed oil were more than four times the 1965 level, and estimated seed exports of 207,000 tons were over 40 percent above the 1965 level. Exports apparently continued to increase in 1969 and should advance in 1970. The major exporter of oil is Romania; of seed, Bulgaria. Major markets for Romanian sunflowerseed oil are the Netherlands, West Germany, and West European countries. Italy has been the main purchaser of Bulgarian sunflowerseed.

Due to heavy imports by the northern countries and Yugoslavia, Eastern Europe still is a net importer of sunflowerseed oil, despite its prominence as an exporter. Total imports of sunflowerseed oil are estimated at 267,000 tons in 1968; of seeds, 188,000 tons. And the northern countries experienced a major setback in oilseed production in 1969.

Rapeseed production declined to about 430,000 tons--40 percent of 1968 output--as a result of severe winterkill and the summer drought. The losses are expected to increase import requirements of Czechoslovakia and East Germany, which purchase primarily from the USSR. Poland had become an important exporter of rapeseed, selling 175,000 tons of seed and 52,000 tons of oil in 1968, largely to Western Europe. Sales were down substantially in 1969.

Vegetable oil consumption in most of Eastern Europe is quite low when compared with U.S. per capita consumption in 1967 of 15.9 kilograms (table 6). Consumption of animal fats generally is well above U.S. levels. A trend toward increased consumption of vegetable oils in Eastern Europe suggests that the region eventually may consume much of the expanded output.

Sugar beet production in Eastern Europe dropped 22 percent in 1969. Output fell 27 percent in the northern countries--major producers of the region--and production was lowest since 1962. A good crop in the southern countries helped cushion the fall in the region. Area declined slightly from 1968 levels--well below plantings earlier in the decade in most countries. Policie generally do not favor expansion of sugar beet area. Although the region is a major importer and exporter of sugar, foreign trade prices apparently have bee sufficiently low to discourage production beyond self-sufficiency. Yields expanded sharply in the 1960's. Further area contraction is likely in surplus-producing countries.

Although the drought in the north sharply reduced sugar beet yields, a long autumn and improved weather conditions reportedly favored sugar development. Higher sugar content may offset part of the decline in sugar beet outpu

Tobacco production in Eastern Europe also received a setback in 1969, falling an estimated 9 percent. Tobacco in Bulgaria--the leading producer--wa seriously affected by disease on about one-fifth of the area. Bulgarian outpu of oriental tobacco declined 9 percent.

Tobacco is the second leading agricultural export in Eastern Europe. 8/ Almost all is oriental type. Bulgaria and Yugoslavia are the leading exporte Bulgarian exports of oriental tobacco declined from 76,000 tons in 1967 to 68,000 tons in 1968, and continued downward to an estimated 60,000 tons in 19 with a further decline likely in 1970 (table 15). Yugoslav exports also have turned down since 1965, although purchases by the United States--the major market--peaked in 1968.

CHANGES IN AGRICULTURAL TRADE

Total imports and exports of Eastern Europe continued to climb during th latter half of the 1960's, but agricultural trade patterns were irregular. T region remains a net importer of agricultural commodities, with total agricul tural imports valued at an estimated $3.5 billion and exports at $2.8 billion in 1968. Agricultural commodities accounted for an estimated 22 percent of i ports and 18 percent of exports in 1968. The total value of agricultural imports remained relatively stable from 1966 through 1968, but the share of total imports declined. The value of agricultural exports jumped from about $2.6 billion in 1966 to a peak $2.9 billion in 1967, but then slipped again i 1968. Total agricultural exports probably made few gains in 1969, but import probably increased.

East Germany remained the leading importer of agricultural commodities i 1968 with imports of about $1 billion. Czechoslovak imports stepped up 7 per cent to more than $800 million. Poland and Hungary imported roughly $600 million and $400 million worth, respectively. Yugoslavia had the sharpest re ductions in agricultural imports--falling one-fifth to about $250 million.

8/ Exports in 1967 were estimated at $143 million; Bulgaria accounted for $89 million.

Bulgaria held first place as an agricultural exporter with sales valued at more than $700 million in 1968. Romanian agricultural exports slipped more than 10 percent to $500 million; Polish sales gained slightly to nearly $500 million. Hungarian sales held at more than $400 million. Yugoslav exports dropped sharply to about $275 million.

About two-thirds of Eastern Europe's total trade continued to be exchanged with Communist countries; one-third with the USSR alone. Most Yugoslav trade, however, is with non-Communist countries and Romania has stepped up trade outside the Communist region. The principal agency for coordinating trade activities in the region is the Council for Mutual Economic Assistance (CEMA or COMECON). Members of CEMA include the East European countries (except Yugoslavia, which has observer status), the USSR, and Mongolia. Members effect limited clearing in rubles through the International Bank of Economic Cooperation in Moscow, although most trade still is under bilateral agreement.

The 23rd session of CEMA, held at the summit level in Moscow in April 1969, took up questions of economic integration and coordination, with special emphasis on the 1971-75 plan period. Problems of nonconvertibility of currency, which have hindered trade evaluations, remained unresolved. The greatest progress in CEMA probably has been in the scientific-technical area. The CEMA Standing Commission on Agriculture held its 28th meeting in Bucharest in May 1969. Member countries agreed to expand programs during 1971-75 for exchange of seeds, pedigree livestock, and semen; for cooperation in plant and livestock protection; and for the exchange of technical information and experience. The Commission will continue to coordinate efforts in international testing of seeds and machinery standardization and it has sponsored some work in coordination of scientific research and long-term economic projections.

Cotton is Eastern Europe's leading agricultural import. 9/ Cotton imports increased from 623,000 tons in 1967 to 631,500 tons in 1968 (table 8). Cotton imports in 1968 were 8 percent above the 1961-65 average. Incomplete trade data for 1969 indicated that Yugoslav and Hungarian purchases were exceeding 1968 levels, but Polish purchases were less. Only a small amount of cotton is produced in Eastern Europe, primarily in Bulgaria. The Soviet Union is the principal supplier of cotton to Eastern Europe, accounting for 57 percent of the total in 1968. The UAR has been the second largest source, but purchases from there were reduced in 1968. The United States has sold considerable quantities of cotton to Poland and Yugoslavia and accounted for about 6 percent of East European imports in 1968. Other major sources have been Syria, Greece, and Iran.

After cotton, the leading agricultural imports are wheat, fresh meat, wool, oil cake and meal, fresh fruit, and feed grains. Wheat and meat imports were down substantially in 1968, but wool, oil meal, and feed grain imports increased. Fruit imports may have declined slightly.

9/ The value of imports in 1967 was estimated by FAO at $440 million.

Table 8.--Eastern Europe: Imports of lint cotton, average 1961-65, annual 1966-68, and origin 1967 and 1968

Item	Czecho-slovakia	East Germany	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries	Eastern Europe
	1,000 tons									
Total imports										
1961-65 average	101.0	101.1	136.0	338.1	40.5	67.4	64.1	72.6	244.6	582.7
1966	113.0	90.3	156.0	359.3	54.0	78.2	76.7	87.4	296.3	655.6
1967	103.0	84.7	133.4	321.1	50.7	88.6	71.9	90.7	301.9	623.0
1968 1/	107.0	87.2	156.4	350.6	58.0	74.8	76.1	72.0	280.9	631.5
Origin in 1967										
USSR	55.0	79.0	76.2	210.2	30.6	40.4	31.2	21.2	123.4	333.6
UAR	24.0	5.7	10.0	39.7	5.3	6.3	10.2	10.9	32.7	72.4
U.S	---	---	15.2	15.2	---	---	---	29.7	29.7	44.9
Other	24.0	---	32.0	56.0	14.8	41.9	30.5	28.9	116.1	172.1
Origin in 1968 1/										
USSR	69.0	77.4	80.8	227.2	36.1	44.2	29.4	23.8	133.5	360.7
UAR	15.0	4.8	5.6	25.4	5.0	3.6	10.0	9.8	28.4	53.8
U.S	---	---	26.2	26.2	---	---	---	14.8	14.8	41.0
Other	23.0	5.0	43.8	71.8	16.9	27.0	36.7	23.6	104.2	176.0

1/ Preliminary.

Leading agricultural exports are fresh meat, tobacco, canned meat, corn, live cattle, wheat, and wine. Corn and wheat exports dropped sharply in 1968--a result of drought conditions in that year. Other commodities declining substantially were tobacco and canned meat. Fresh meat exports remained relatively constant, but live cattle exports may have increased. Wine exports rose substantially.

Total U.S. agricultural exports to Eastern Europe in 1969 were valued at $99.5 million, down about 26 percent from 1968. Reduced feed grain and cotton sales accounted for most of the decline. The leading exports to Eastern Europe were feed grains, $29.7 million, and soybean meal, $26.6 million. The United States supplies a substantial share of East European imports of these commodities. In 1968 direct U.S. sales, excluding transshipments, accounted for about 45 percent of East European feed grain imports and 20 percent of oil meal imports. Soybean meal has made the most substantial growth in recent years. U.S. agricultural exports to Eastern Europe represent about 4 percent of the region's imports of farm commodities. U.S. agricultural exports to Eastern Europe have declined since 1966, primarily as a result of the falling-off of the market in Yugoslavia--previously the major purchaser of wheat. Total sales to Yugoslavia declined from $118.2 million in 1966 to $18.7 million in 1968 but recovered to $22.6 million in 1969. The leading U.S. customers in 1969 were Poland--purchases of $37.2 million--and East Germany--purchases of $24.6 million.

U.S. imports of agricultural commodities from Eastern Europe in 1969 were valued at $83.5 million, about 2 percent higher than in 1968. The major imports were canned hams--$46.9 million; other canned pork--$8.7 million; and tobacco--$11.2 million. The leading suppliers to the U.S. market were Poland--sales of $56.0 million--and Yugoslavia--sales of $27.5 million.

SLOWER RATES OF INCREASE OF AGRICULTURAL INPUTS

The countries of Eastern Europe made sharp advances in agricultural investments and the supply of productive inputs into agriculture during the 1960's. Smaller gains were apparent in 1969. The progress in the decade, however, left agriculture in a far stronger position than that of the previous decade.

One major advance in the decade was the greatly expanded use of mineral fertilizers (table 9). The apparent growth was 7 percent in 1969 compared with 15 percent in 1968 and an average annual increase of about 11 percent since 1960. In 1969 all countries but Yugoslavia and Romania exceeded 100 kilograms per hectare and East Germany attained an estimated 314 kilograms per hectare. Yugoslavia maintains a subsidy on fertilizer to encourage greater use on private farms. Fertilizer usage is mandatory for private farmers in Poland.

Government deliveries of tractors and grain combines to agriculture generally reached their highest levels in the first half of the 1960's. Subsequently, total tractor and combine numbers have continued to increase, but at slower rates. Bulgaria and Poland have diverged more from the regional pattern with sharper advances in machinery deliveries occurring in more recent years. This situation apparently continued in 1969. In most countries, a greater share

of agricultural investments has moved into farm buildings and construction, and less into machinery in recent years. Some countries took measures in 1969 to speed up farm machinery purchases or to reverse declines. For example, in Hungary credits for machinery repairs were abolished. In Yugoslavia, private farmers were given incentives to purchase more equipment with a price reduction on agricultural machinery and on tractors of up to 35 horsepower.

Table 9.--Eastern Europe: Fertilizer consumption per hectare of arable land, 1960 and 1965, annual 1967-69 1/

Country	1960	1965	1967	1968	1969 2/
	Kilograms of nutrients				
Czechoslovakia	92	152	173	178	192
East Germany	188	266	276	303	314
Poland	46	71	102	118	138
Northern countries	82	125	150	165	183
Bulgaria	34	79	133	186	158
Hungary	29	63	91	112	127
Romania	7	25	42	46	50
Yugoslavia	34	55	62	67	71
Southern countries	23	50	72	87	88
Eastern Europe	52	85	108	124	133

1/ Includes cultivated land, orchards, gardens, and vineyards.
2/ Preliminary.

Some increases in irrigated area were reported in 1969. Bulgaria, with about 1 million hectares, or 22 percent of the arable land under irrigation in 1968, announced an increase of 3.5 percent. Romania reported a major increase in agricultural investments in 1969, much of which may have been directed into an ambitious irrigation program, which is considerably behind schedule. Irrigated area in Romania reached 505,000 hectares in 1968 and an additional 140,000 hectares reportedly were brought under irrigation in 1969. A goal of 2.5 million hectares has been established for 1975.

AGRICULTURE'S ROLE IN ECONOMIC REFORM AND DEVELOPMENT

Economic reform in Eastern Europe generally has been directed more specifically to industry than agriculture, but agriculture has been affected in several instances through expanded marketing outlets and greater leeway in input purchases. 10/ Together with measures to increase farm profitability, government subsidies to farms have been reduced in some countries. Measures have be

10/ For a more detailed description of the reforms in one country, see The Agricultural Economy and Trade of Hungary, ERS-Foreign 269, May 1969.

undertaken to encourage specialization and interfarm cooperation and, in Poland, inter-agricultural circle cooperation in machinery use.

Meanwhile, several governments have adopted programs to improve income and living conditions in rural areas. In 1969, there were major developments in this sphere in Romania. Agricultural specialist wages, for example, were increased 20 percent in November and the payment system on collective farms was adjusted in December to better reflect quality of work. A 50 to 70 percent increase in collective farmer pensions also was decreed to be effective January 1, 1970. Bulgaria introduced wage increases for selected specialists ranging from 4 to 12 percent during the latter part of the year. Legislation for a voluntary program of pension and disability insurance was introduced in the Voyvodina Region of Yugoslavia. Rural housing construction was subsidized in Czechoslovakia to help reduce the outflow of young people. In Poland, credits to farmers were stepped up sharply and credit limits were raised to ease building loans.

The reforms introduced since the mid-1960's throughout Eastern Europe generally have been intended to stimulate economic growth without major restructuring. Limited changes have been effected through decentralization of planning and management and greater reliance on profits and other economic indicators. The market orientation of the Yugoslav economy--which has received wide-reaching reforms--has been introduced in very limited fashion elsewhere in the region. Among programs in other countries, the Hungarian and Czechoslovak reforms probably have attempted to go furthest in decreasing government involvement in pricing and marketing.

In early 1969, economic reforms generally were operating on a national scale in Czechoslovakia, East Germany, Hungary, and Yugoslavia, and experimentally in the other countries. Bulgaria expanded the scale of the reforms in 1969, and Romania made similar plans for 1970. Poland reorganized its banking system in 1969, a move allied with reform plans.

Czechoslovakia experienced strong inflationary pressures in connection with the slowdown in growth, income advances, and political turmoil in 1969. A change in top leadership occurred in 1969. These pressures and changes resulted in an essential curtailment of the reform program as it existed in 1968 and a reassertion of the dominant role of the government. Wage controls were instituted and prices again were fixed. A temporary ban on price increases was introduced on January 1, 1970.

East European countries reported growth in national income in 1969 ranging from 3.5 percent to at least 8 percent. The four southern countries which have the lowest levels of income attained the highest growth rates, generally exceeding 7 percent. Following a slowdown in 1968, growth in most East European countries returned to rates exceeding those prevailing during the first half of the 1960's--the period preceding the reforms. Romania, however, which had the highest growth rates of the earlier period, showed scant improvement from 1968 and continued to evidence slower growth than in previous years. Yugoslavia had the most rapidly expanding economy in the region in 1969; both agriculture and industry contributed to faster growth.

Growth of national income in the three northern countries was slower in 1969 than in 1968. Poland slumped most severely--reflecting the poor results in agriculture--falling well below growth rates of 6 to 7 percent in most recent years. Reported growth rates of 6 percent in Czechoslovakia and 5 percent in East Germany were less than in 1968, but higher than pre-reform rates. Price increases in Czechoslovakia, however, may have exaggerated real gains.

OUTLOOK

Planned rates of growth for East European agriculture in 1970 vary sharply by country, but rates in most countries, if accomplished, would raise total agricultural output well above the minimum terminal levels envisaged in the 1966-70 plans. The three northern countries have targeted annual increases of about 3 percent. These generally exceed typical growth rates of the 1960's. Attainment will depend on the ability to maintain livestock herds and to obtain major improvement in crop production in 1970.

Sharp agricultural growth rates are planned in Bulgaria (12 percent) and Romania (16 percent). Rates of this magnitude have been accomplished in only one recent year--1966--when weather was especially favorable. The reported high rates of growth in Hungary and Yugoslavia in 1969 apparently have caused planners to set modest growth targets for 1970. Hungary, for example, plans a 1-percent increase in agricultural output.

Some hints of the direction of the 1971-75 plans began to surface in 1969. Although most governments did not announce specific targets, there is an exception. Romanian General Secretary Ceausescu in his report to the 10th Romanian Communist Party Congress in August announced a planned increase in gross agricultural output during 1971-75 of 28 to 31 percent over the 1966-70 average. Grain output in Romania is scheduled to reach 17.5 to 18.5 million tons by 1975.

The outlook for the fall-sown crops in Eastern Europe was not uniformly favorable at the onset of winter. Dry weather during the fall in the southern countries delayed completion of sowing, which, in some cases, was then curtailed by early snowfalls. In Yugoslavia, wheat area reportedly is down about 10 percent from the previous year. Neighboring Hungary had better crop development. Weather remained extremely dry in Bulgaria during the fall. Dry weather also was experienced in the northern countries through October. Wheat was planted on a smaller area in Czechoslovakia. Fall-sown crops generally entered the winter in good condition in Poland and subsequent snow cover has been beneficial. Increased production of feed grains has been planned in the southern countries to offset declines in the winter wheat area and to promote livestock development.

The plans to stimulate livestock production will probably affect rebuilding of herds. The current situation does not appear to warrant substantial improvement in livestock product output in most countries before the second half of 1970. Tight feed supplies will have a dampening effect on growth of livestock product output in the northern countries and considerable time will be required to increase herds in the southern countries.

MAINLAND CHINA

AGRICULTURAL OUTPUT INCREASES

For the second time in a decade the Chinese Communist regime has reverted to crash programs for catching up economically. Prospects for success were much better in 1969 than in the early 1960's. Mainland China's economy, though still constrained by the effects of the cultural revolution in early 1969, was well along the road to recovery by the end of the year. Performance in every major sector of the economy probably exceeded that of the 2 previous years (1967-68), and output in some sectors may have exceeded the peak year of 1966.

Agricultural production in 1969 exceeded the near-average level in 1968 by a significant margin, but did not equal the 1967 level. This increase in output coincided with a more stable political situation. During 1969 the ninth people's party congress was convened, a new constitution was adopted, a new politboro was elected, and the central committee was enlarged. Accompaning the change in the political climate was a spate of low-key official pronouncements that modified many hard-line rural reforms introduced from mid- to late 1968 and reduced apprehension among peasants. These changes indicated some concern over the numerous economic and political adversities that evolved from the cultural revolution.

The Communist regime was more economically focused last year. Internationally, it broadened the scope and amount of foreign aid, reestablished diplomatic contacts, and increased foreign trade. Domestically, the regime concentrated on rebuilding party structure, strengthened the administrative structure by streamlining organizations, and consolidated functions of government agencies, such as the Ministry of Agriculture's absorption of the Ministry of Forestry and of state farms.

AGRICULTURAL PRODUCTION

Agricultural production in Mainland China in 1969 topped that of 1968 with many food and industrial crops registering gains. Livestock production also rebounded from the downturn experienced during the cultural revolution. Although weather conditions throughout the year were less favorable than in 1967, higher inputs made available in 1969 helped to raise production to a level approaching the outstanding harvest of 1967.

As far as known, little, if any, increases occurred in the total planted area. However, some changes in cropping patterns and some substitution of crops occurred, particularly in East and Central China following flooding of the Yangtze River in July and August. Production gains in 1969 thus were primarily a function of yield response to higher applications of chemical

fertilizer--and other inputs. Gains were also made in soil, irrigation, and water management and in repair of farm machinery and tools.

Grain and Food Crops

Production of food grains in 1969 (including potatoes at one-fourth grain value), which occupy approximately 80 percent of China's sown area, approached 200 million tons. Wheat, rice, and potato production was average or above average. Miscellaneous grain production increased substantially, but the heavy flooding and waterlogging of the intermediate rice crop in Central and East China limited gains in the total rice output for the year.

Although a severe winter and late spring in the North China Plain reduced the total area of winter wheat, subsequent favorable growing weather with adequate moisture in the spring contributed to higher yields of both winter and spring wheat. Other grain and pulses--barley, beans, field peas--and green manure crops and rapeseed, particularly in the Yangtze River Valley, were less favored. And a wet and unusually cold spring lowered prospects for the winter sweetpotato crop in Kwangtung Province in southern China and the early rice crop in Kwangtung, Kiangsi, and Fukien Provinces. Despite these provincial set backs, the early rice crop for the entire country equaled or exceeded the poor crop in 1968. Overall estimates of the summer harvest of grains, which constitute almost 40 percent of total grains, showed a higher level of output than in 1968.

Except for the July-August flooding along the Yangtze River in Central and East China, which damaged the intermediate rice crop, favorable weather existed for development of late autumn harvested crops. The late rice crop on an expanded area probably equaled, or exceeded, the good crop in 1968, but the decline in the larger, intermediate rice crop held the total rice crop to the 1968 level--80 to 85 million tons.

Other late harvested crops--potatoes and miscellaneous grains--matured under favorable weather conditions. Potato output (both sweet and Irish) might have exceeded that of 1968. Production of coarse, late maturing grains (corn, kaoliang, millet, oats, and buckwheat) probably set a record in 1969. In addition to the improved weather last year, there is some evidence that new seed varieties helped raise yields. The total area planted to improved seeds is unknown, but press reports suggest that it has expanded in recent years. Mention of high-producing varieties of wheat and rice as well as corn and sorghum were more prominent in the Chinese press in 1969 than in any previous year.

Other Crops

Some damage from drought in Northwest and Southeast China affected 1969 industrial crops, primarily cotton and tobacco. Although cotton output held close to the 1968 level, tobacco production declined. Rapeseed, the major vegetable oilseed grown in southern China, was affected by the long period of wet and unusually cold weather in the early spring. Yields were less than average. Area also declined. Increases of varying magnitude, however, occurred for soybeans, peanuts, sugarcane, sugar beets, tea, silk cocoons, and other minor crops. Less is known about other oilseeds such as sesame, sunflowerseed, and tung nuts. It does not appear that increases in production of any of the industrial crops was sufficient to equal the level of those crops in 1967.

Livestock Production

Official claims indicate an increase in livestock production in 1969. Favorable weather conditions and improvements in the large pastoral areas contributed to better roughage feed supplies for horses, mules, cattle, donkeys, and sheep and goats, but there is no hard evidence of increased feed supplies to support the reported strong growth in hog numbers. Hog numbers declined considerably during the cultural revolution (1967-68). Since then officials have offered incentives to peasants to increase hog numbers, both on private plots and on collective farms. While hog numbers probably increased in 1969, numbers have still not reached the pre-cultural revolution level.

FARM INPUTS AND POLICY CHANGES

The convening of the ninth people's party congress in April 1969, the first in 13 years, highlighted the domestic scene in Mainland China. However, no significant farm policy change was announced at the congress, nor was any specific guideline outlined as to the direction or intensity of farm programs. During 1969 officials again supported programs begun during the cultural revolution. Increasing grain production was designated as the major production goal, followed by cotton and vegetable oilseeds. The threat of further collectivization--with the prospective loss of private plots and sideline pursuits--was modified, although communes and brigades were consolidated and strengthened. And the continued influx of urban dwellers into the countryside during 1969 complicated farm management and labor problems and made food distribution more difficult.

Some former agricultural programs surfaced in scattered governmental pronouncements during the year. Birth control, for example, again became a national objective, and the rural communities were encouraged to become self-supporting units. Specific complementary industries, such as transfer of packing, milling, canning, and tanning enterprises (some supported with state funds), were introduced into rural areas. These developmental programs are reminiscent of Mao Tse-tung's original "National Program for Agricultural Development" (1956-67). Evidence suggests that some of these programs were supported by state funds--particularly the construction of small factories (machine, tool, farm equipment), fertilizer factories, power plants, and pumping stations. Education and health care were assigned to local administrative levels, primarily communes and brigades. The rural credit system was modified broadening the scope of credit and increasing the use of funds in local enterprises.

The administration of farm programs remained primarily under military supervision. There was some evidence that party revolutionary committees were present at the working level, but administration and discipline were weak. The relaxing of party discipline in the rural areas worked to the advantage of peasants during the year. This relaxing of discipline manifested itself at harvesttime when government agencies encountered difficulties in procuring farm products despite higher production of most crops.

CONSUMPTION OF FARM PRODUCTS

The more equitable food distribution system developed by the Communist regime has been an important factor in countering the impact of insufficient production throughout China during the past decade. While many deficit areas still exist and unusual circumstances cause food shortages in different areas, food from surplus areas and government relief are more in evidence throughout the country than formerly. Per capita consumption of food, however, remains at a comparatively low level even for the East Asian area. The caloric intake does not appear to have regained the 2,200 to 2,300 calories estimated for the late 1950's, and the food intake is still heavily weighted with carbohydrates. Based on incomplete data, the estimated average per capita consumption of food during the 1968/69 consumption year was about 10 percent less than in 1967/68. These levels have not changed greatly since Chou En-lai announced in 1965 that China's agriculture had regained the pre-Leap Forward level.

Some shortages of food also occurred before the early harvest in 1969, particularly in Kwangtung Province. Government collectors' pleas to peasants to turn in "patriotic" grain as a "mark of loyalty to chairman Mao" is indicative of the techniques used in collecting compulsory deliveries and in government purchases of farm products in 1969. The use of the army in harvesting during 1969 not only added to the manpower force but also insured compliance to state procurement quotas. Significant to this better control was the curtailment of grain sales by individual peasants in the free market in 1969. During 1967-68, when a breakdown in government control developed, peasan private sales of grain increased even though sales of rationed commodities by individuals are prohibited in China.

The slight, but not critical, decline in the 1968/69 diet may be attributed somewhat to the overtaxing of the private sector in 1968. The question arises as to the future capability of the private plots to contribute further to peasant needs. Government action, for example, has not only reduced the size of private family plots but has also sponsored large migrations from urban to rural areas in 1968 and 1969. This action places greater demands on private plots as a source of food. Although the government recognizes the importance of these plots, there is no guarantee that this land will not be absorbed by the commune at a later date.

Consumption of other farm products, particularly fibers, reportedly increased in 1969. A reduction in availability of clothing in 1968 resulted primarily from disruptions in textile factories and not from raw material shortages. Ration coupons, a necessary credential to purchase textiles and clothing in China, appeared earlier in 1969 than the midyear distribution in 1968. Also the amount of the ration has increased. It is doubtful whether domestic availability of clothing and other textile goods in 1969 approached the per capita level of the late 1950's when annual ration allowances for cloth amounted to 20 and 27 feet.

UPSWING IN FOREIGN TRADE IN 1969

Following a 2-year decline, China's foreign trade upturned decidedly in 1969. But, like the rest of the economy, the trade sector is adjusting to the economic turmoil created by the cultural revolution. There is little likelihood that the level of imports and exports reached that of 1966 (estimated at $2.05 billion and $2.25 billion, respectively), China's peak trade year. Estimated total trade turnover at the end of 1968 was 15.6 percent less than in 1966, with exports 17.4 percent and imports 14.1 percent lower. Midyear data for 1969 showed exports increasing about 10 percent and imports 9.5 percent compared with the comparable period in 1968. This rate may have increased during the second half of 1969. If so, China's trade in 1969 perhaps equaled that of 1966.

Imports and exports appeared to be more in balance than in previous years. Heavy trading by nations at the Canton fair may have contributed to this improved trade position. However, rather broad variations in balances occurred within certain countries. Mainland China's exports to Hong Kong and Singapore increased substantially over 1968, while trade with Japan, which set a record in 1969, swung heavily in favor of Japan. Increased Japanese imports of chemical fertilizer, and iron and steel accounted for most of this imbalance.

Trade with the Free World, accounting for about 80 percent of China's total trade, may have equaled or exceeded $4 billion in 1969. Trade with East European Communist countries increased, but trade with the USSR appears to have continued to decline--from 50 percent ($2 billion) of China's total trade in 1959 to only 2.4 percent ($96 million) in 1968. Trade with West European countries--particularly the United Kingdom, France, and Italy--increased after declines in 1967 and 1968.

Mainland China's imports of over $391 million from Japan in 1969 exceeded those of 1968 by 20.3 percent, while the $234.5 million worth of exports to Japan exceeded those in 1968 by only 4.7 percent. Exports, however, were substantially below those for 1966 and 1967. This increase of imports from Japan highlights the rapid swing of China's trade to the so-called Japanese "friendly firms."

Commodity composition of China's foreign trade, especially imports, substantially reflected the effects of the cultural revolution on the production and supply of goods in 1968 and 1969. In 1968, machinery and iron-steel imports were down sharply, but imports of these items increased considerably in 1969. Imports of chemical fertilizers, food (primarily wheat), crude materials, non-ferrous metals, and basic chemicals, all of which directly or indirectly affect agriculture, also increased in 1969. Preliminary data suggest that the volume of imports in 1969 was restricted to a level below exports to build up foreign exchange reserves. Also, delivery dates of some purchases were extended well into 1970--wheat, for example--in an apparent effort to extend payments.

While exports of non-ferrous metals dropped sharply in 1968, exports of food products, crude materials, basic chemicals, and certain textiles increased somewhat. A similar pattern of exports developed in 1969. Increases in certain food products, such as livestock and livestock products, poultry and eggs,

sugar, fresh and processed fruits and vegetables, and crude animal products offset declines in exports of rice and possibly soybeans. Exports of manufactures, textiles, furs, and crude vegetable materials also increased.

China's fourth grain purchase in 1969--2.2 million tons of wheat from Australia on December 9--boosted total purchases to a record 7.5 million tons. That contrasts with less than 4 million tons in both 1967 and 1968. New delivery dates extend well into 1970. Purchases consist of 4.5 million tons from Australia, 2.2 million tons from Canada, and 800,000 tons from France.

China's total imports of wheat in 1969 were an estimated 4.5-5 million tons, up slightly from 1968. So far, almost 4 million tons are committed for delivery in 1970. Imports of wheat alone were about 3.9 million in 1967 and 4.4 million tons in 1968. Aside from the favorable prices, China's large purchases of wheat may reflect larger drainage on grain stocks than during the cultural revolution when state procurements lagged.

The two major farm products exported from China, rice and soybeans, probably declined in 1969. Rice exports exceeding a million tons annually since 1965 were somewhat less in 1969. Mainland China exported 300,000 tons to Japan in 1966 but Japan dropped out of the market entirely in 1969. Pakistan also withdrew from the market in 1969. Other traditional importers of Chinese rice appear to have maintained their usual level of purchases. Hong Kong's imports were down slightly. New markets in Africa and Latin America do not appear to have offset the declines in the traditional markets.

Incomplete data indicate that exports of soybeans, averaging slightly above one-half million tons annually since 1964, declined in 1969, due partly to the lower production in 1968. Japan usually takes about three-fourths of Mainland China's soybean exports.

Table 10.--Mainland China: Trade of selected major commodities, 1962-69

Year	Imports			Exports	
	Total grain	Wheat 1/	Cotton (raw)	Rice 2/	Soybeans
	1,000 tons				
1962	5,999	4,419	67	578	342
1963	4,557	4,394	143	640	332
1964	6,795	5,542	105	785	498
1965	5,520	5,250	168	755	576
1966	6,447	6,375	107	1,210	550
1967	4,030	3,871	88	1,225	564
1968	3/4,500	4,445	68	1,000	600
1969 preliminary	3/4,700	3/4,700	75	n.a.	n.a.

1/ Includes wheat flour in wheat equivalent.
2/ Excludes exports to Vietnam.
3/ Estimate.

OUTLOOK

The rise in economic activity throughout Mainland China in the second half of 1968 accelerated in 1969, and is expected to continue in 1970. China is a country catching up. The programs which appeared as 1969 closed suggest that a more realistic approach is gaining prominence. These programs, although still under the shadow of Mao Tse-tung's doctrine of peasant self-denial, appear to have produced some positive results.

Barring unfavorable weather and radical policy changes, agricultural production could increase substantially in 1970. Records could be set, but probably not in the proportions suggested by the slogans now appearing in many parts of the country. Having endured two economic setbacks, during two decades of Communist rule, Mainland China may have arrived at a take-off point. Substantial gains could be made in agriculture and other sectors of the economy in the decade ahead.

A number of factors support this projection. Programs for rural and agricultural development now emerging stand a much better chance of implementation than formerly. While observed progress has been slow and programs for advancing agriculture have been radical, uncoordinated, and short lived, many long-range programs are coming into fruition. These programs include expansion of irrigation and water management, fertilization, farm mechanization and improved tools, improved seeds on a small scale, and support industries for agriculture. These programs, along with decentralization of light industry to rural areas, improved credit facilities, increased state investments in projects that complement local production, and improved methods for distributing supplies, may bring the agricultural sector to a peak effort, heretofore impossible.

As more state funds go to support rural industrialization programs and to construct intermediate and possibly larger water conservancy projects, peasants will become more active in rural development and agricultural production. Also, the gradual ascendancy of a more moderate approach to agriculture following the hard-line policy toward further collectivization in 1968 and the apparent re-emergence of the production team as the accounting unit are generating greater peasant effort. Off-season farming activities which supplement farming operations have been carried out in more areas in larger volume and appear to be better organized than in recent years.

Contrasting this optimistic outlook is the heavy investment and technology needed to offset the impact of weather. Historically, China has been plagued with one to two poor years of every five. China has not had an extended drought in over 8 years. Even though some progress has been reported in water conservation programs under the "guaranteed high yield field" program, the need for continued and concentrated investments is paramount to the success of any long-term agricultural program.

Mainland China's foreign trade of agricultural products should continue to expand in 1970 and beyond. Imports of fertilizers and pesticides will remain high because they are needed to augment domestic production. Agricultural machinery, from imports and local production, is also expected to increase. Wheat and cotton imports should remain about static or trend upward slightly in

1970. The world price of wheat will be a major factor. Exports of rice may continue to decline because of little or no increase in the crop in 1969 and a seemingly shrinking market. Soybean exports and some products from the private sector, notably pork and poultry products, could increase slightly.

OTHER COMMUNIST COUNTRIES

NORTH VIETNAM

Like the rest of its economy, North Vietnam's agricultural sector took stock of shortcomings in 1969. Relatively little data on actual accomplishments for the year just ended are available, but modest gains are expected for 1970. Poor weather, continued shortages of inputs, and a weakening of party discipline in the countryside contributed to the marginal performance.

North Vietnam experienced a cold winter, spring flooding, and a fall drought during the past crop year. Both the early (fifth month) and the spring rice crops, which account for about one-third of rice output, were affected. Damage was moderate to light. The late rice crop (tenth month)--Vietnam's major crop--was more seriously affected by a fall drought that extended into October. Harvesting was delayed, forcing the most stringent harvesting schedule imposed by the regime. Estimated production has averaged between 4 and 4.5 million tons in recent years. An 80,000-hectare increase in the planted area suggests a slight increase in rice production in 1969. Supplementary imports of grain ranging from 400,000 to 700,000 tons were needed to maintain enough food to supply about 2,100 calories per person per day. It is estimated that China supplied 150,000 to 200,000 tons of rice to cover part of this deficit. Also, the USSR supplied large amounts of wheat and flour.

Probably more important to the planned production for 1970 than to the last year's accomplishments is the party's recent emphasis on livestock production. Plans for 1970 call for a 17-percent increase in hog numbers, raising total end of the year numbers to an estimated 6 million head compared with the 5.2 million in 1969.

The additional feed supplies for this proposed increase in hog numbers will be provided partly from government stocks and partly from an expansion of the feed grain area on collective farms and household plots. About half of the sweetpotato and manioc crops, for example, will be used for livestock feed. The government has indicated that 2 percent of the total paddy rice and corn production it obtains will be made available to farms and farmers participating in livestock programs.

Current policy decisions affecting agriculture are not clearly defined. Evidence suggests that a controversy between party leaders exists over the future direction of socialized agriculture--a toleration of private initiative

on the one hand, and a strong determination to impose rigid control on the other. A serious shortage of farm labor also exists, making the government's choice in this policy matter a difficult one.

The crop outlook for 1970 largely will hinge on peasant responses to government programs and on the availability of fixed and working capital now urgently needed to compensate for farm labor shortages. Weather reports indicate that the fall drought reported during the harvesting of late rice extended into the planting period for the early rice crop.

NORTH KOREA

North Korea had good weather in 1969 compared with the drought and flooding reported in 1967 and 1968. Official estimates of the 1969 grain harvest indicate an output of approximately 5.5 to 5.7 million tons. This conflicts with a recent Korean news agency statement that output of grain since 1962 had remained at the level of 5 million tons. The 1967 goal to produce 6.7 million tons of grain has been extended to 1970.

Still a food deficit area, North Korea imported about 390,000 tons of grain in 1967. Imports were continued in 1968 and 1969, but the level is unknown. Cotton also is a major import. Major farm exports include rice, fruits, tobacco, and silk. North Korea may be developing a program similar to that of Mainland China whereby expensive rice is exported and cheap wheat is imported.

North Korea has a well-developed irrigation system. Electricity is available in every rural village and reportedly is supplied to 91 percent of the households. Tractor numbers are estimated at 23,000 in terms of 15-horsepower units.

Agricultural programs for 1970 put a heavy stress on increasing livestock production--a goal being emphasized in all Asian Communist countries this year.

MONGOLIA

During 1969, Mongolia's agricultural situation moved from one of early optimism to one of contained performance. In the beginning of the crop year official reports indicated favorable soil moisture levels for the spring wheat crop. However, the yearend report stated that a prolonged drought developed throughout the country during the year and the harvest of grain was below the planned level.

Mongolia had 490,000 hectares under cultivation in 1969, 80 percent of which was planted to grains. Compared with previous years, this would indicate some shifting of the grain area to other crops--particularly vegetables. Grain production for 1969 might approach 300,000 to 320,000 tons.

Livestock numbers exceeded planned goals by about 2 percent, raising total numbers to approximately 25 million head. Sheep represent about 52 percent of

this total. New heated enclosures for 3.4 million head of livestock were completed last year.

Plans for 1970 project a 15.9 percent-increase in agricultural output over the 1969 level, and additional heated enclosures for 7.7 million animals will be built.

CUBA

Economic growth in Cuba has stagnated since 1967. Gross national product fell 5 percent to $3.0 billion in 1968 and evidence suggests that little or no recovery occurred in 1969. The year-to-year production change in sugar has strongly influenced Cuba's planned economic development. Output of 4.5 million tons in 1969--the lowest since 1963 and the second successive decline--accounts for the reported growth lags in recent years.

While Cuba has attempted to diversify its agriculture, the re-emphasis on sugar suggests that progress in other agricultural areas has been slow. There is some evidence that the rice area increased in 1969, but the planned programs for improving pasture lands and intensifying coffee and fruit production lagged. These programs may have been pushed back in 1969 because of the high priority given to sugar.

The plan goal of 10 million tons of sugar for the 1969/70 crop year represents Cuba's most ambitious program. Attaining this goal is premised on the reported 25 percent-increase in land area under cane plantings and the more intensive planting of early maturing varieties during the 18 months prior to the current crop year. As of mid-March the announced results showed a production of 4.5 million tons of sugar--about 400,000 tons below the planned level of that date.

Concomitant with the announced increase in sugarcane plantings, Castro indicated that the rice production is increasing yearly. Production is estimated at 220,000 tons or about the same level as 1963. There was little or no change in cattle numbers during the year, estimated at 7.2 million head. Poultry numbers stabilized in 1969 and egg output approximated 100 million dozen.

Rationing continued for all major food commodities, including sugar, and no real improvement in living standards developed. Cuba's imports of rice and wheat flour probably held at the level of the past few years--150,000 tons and 290,000 tons, respectively. The Soviet Union supplied Cuba with wheat flour purchased in Canada. Most of the rice was supplied by China.

Of the 4.6 million tons of sugar exported in 1968, the Soviet Union received almost two-fifths. Under existing international sugar agreements, Cuba was granted a 2.1 million-ton annual export quota. But by allowing 1.1 million tons to pass through the USSR for re-export purposes, Cuba's quota to the free market increased to 3.25 million tons.

The outlook for Cuban agriculture continues uncertain. Overextension of a single crop could lead to further delays in agricultural diversification. And the heavy investments needed to change Cuba from an agrarian society to a growing industrial one are still lacking.

Table 11.--Eastern Europe and Soviet Union: Area of selected crops, average 1961-65, annual 1966-69 1/

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR	Total Eastern Europe and USSR
	1,000 hectares									
Wheat										
1961-65 average...	1,216	739	430	1,078	1,524	2,966	2,002	9,955	66,600	76,555
1966...	1,142	892	484	1,072	1,679	3,034	1,830	10,133	69,958	80,091
1967...	1,064	929	533	1,160	1,758	2,913	1,880	10,237	67,026	77,263
1968...	1,058	999	570	1,328	1,886	2,817	2,010	10,668	67,231	77,899
1969...	1,027	1,055	590	1,321	2,010	2,600	2,019	10,622	65,000	75,622
Rye										
1961-65 average...	58	429	820	240	4,572	88	163	6,370	16,300	22,670
1966...	42	395	771	220	4,331	91	141	5,991	13,583	19,574
1967...	31	321	746	204	4,298	62	138	5,800	12,418	18,218
1968...	24	338	735	190	4,300	44	132	5,763	12,269	18,032
1969...	24	274	640	193	4,300	45	123	5,599	11,500	17,099
Barley										
1961-65 average...	336	687	438	516	706	237	369	3,289	18,300	21,589
1966...	416	690	521	490	683	246	394	3,440	19,400	22,840
1967...	387	712	553	448	653	257	343	3,353	19,100	22,453
1968...	403	712	595	386	634	292	312	3,334	19,600	22,934
1969...	416	780	610	380	765	300	300	3,551	22,100	25,651
Oats										
1961-65 average...	139	418	319	82	1,556	151	321	2,986	7,280	10,266
1966...	113	389	261	61	1,418	138	320	2,700	7,200	9,900
1967...	120	433	270	55	1,428	127	301	2,734	8,700	11,434
1968...	96	409	256	54	1,395	132	285	2,627	9,000	11,627
1969...	76	400	250	47	1,300	130	273	2,476	9,500	11,976
Corn										
1961-65 average...	632	200	2/	1,269	8	3,308	2,472	7,889	5,887	13,776
1966...	574	151	1	1,237	6	3,288	2,500	7,757	3,229	10,986
1967...	576	150	2/	1,237	6	3,221	2,510	7,700	3,485	11,185
1968...	557	138	1	1,258	5	3,344	2,460	7,763	3,350	11,113
1969...	584	127	2/	1,270	5	3,340	2,397	7,724	5,000	12,724
Total grain 3/										
1961-65 average...	2,399	2,473	2,262	3,204	8,721	6,772	5,362	31,193	128,460	159,653
1966...	2,302	2,521	2,268	3,099	8,471	6,821	5,213	30,695	124,807	155,502
1967...	2,185	2,550	2,314	3,114	8,505	6,604	5,197	30,469	122,172	152,641
1968...	2,151	2,601	2,345	3,238	8,576	6,657	5,223	30,791	121,500	152,291
1969...	2,144	2,636	2,270	3,232	8,745	6,444	5,012	30,483	123,500	153,983
Potatoes										
1961-65 average...	41	492	728	219	2,840	303	311	4,934	8,643	13,577
1966...	34	437	694	198	2,732	306	333	4,734	8,392	13,126
1967...	33	408	686	169	2,763	315	330	4,704	8,331	13,035
1968...	30	372	672	150	2,747	316	332	4,619	8,301	12,920
1969...	30	325	630	140	2,750	308	320	4,503	8,300	12,803
Sugarbeets										
1961-65 average...	71	247	227	125	428	177	84	1,359	3,606	4,965
1966...	63	225	211	108	435	194	106	1,342	3,803	5,145
1967...	61	198	209	104	434	176	102	1,284	3,797	5,081
1968...	54	188	204	104	414	185	79	1,228	3,560	4,788
1969...	57	179	193	98	410	190	95	1,122	3,500	4,622
Cotton (unginned)										
1961-65 average...	52	---	---	---	---	---	10	62	2,420	2,482
1966...	49	---	---	---	---	---	8	57	2,463	2,520
1967...	51	---	---	---	---	---	10	61	2,442	2,503
1968...	43	---	---	---	---	---	12	55	2,445	2,500
1969...	47	---	---	---	---	---	11	58	2,510	2,568
Tobacco										
1961-65...	118	5	5	20	39	37	49	273	n.a.	n.a.
1966...	117	6	4	22	39	38	63	289	4/164	453
1967...	97	6	3	20	42	39	59	266	4/176	442
1968...	105	6	3	21	46	36	57	274	4/176	450
1969...	105	6	3	22	46	36	54	272	4/177	449
Oilseeds 5/										
1961-65...	263	62	127	136	242	532	144	1,506	6,106	7,612
1966...	255	60	125	126	306	558	169	1,599	6,590	8,189
1967...	270	62	125	116	347	575	164	1,659	6,350	8,009
1968...	282	64	125	113	390	664	176	1,814	6,430	8,244
1969...	290	60	110	115	178	660	234	1,647	6,500	8,147

1/ 1969 data are preliminary. 2/ Less than 500. 3/ Includes buckwheat, millet, spelt, mixed grains, and rice; also pulses in the USSR. 4/ Includes makhorka. 5/ Predominantly sunflower in Bulgaria, Hungary, Romania, Yugoslavia and the USSR; predominantly rapeseed in Czechoslovakia, East Germany and Poland. Oilseeds harvested from fiber crops not included.

Table 12.--Eastern Europe and Soviet Union: Production of selected crops, average 1961-65, annual 1966-69 1/

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR 2/	Total Eastern Europe and USSR
	1,000 metric tons									
Wheat										
1961-65 average...	2,208	1,779	1,357	2,009	3,005	4,321	3,596	18,275	50,172	68,447
1966...	3,193	2,247	1,521	2,327	3,603	5,065	4,600	22,556	85,000	107,556
1967...	3,254	2,516	2,012	3,004	3,934	5,820	4,820	25,360	64,000	89.360
1968...	2,527	3,153	2,377	3,352	4,670	4,848	4,360	25,287	76,600	101,887
1969...	2,517	3,280	2,165	3,579	4,910	4,345	4,880	25,676	65,200	90,876
Rye										
1961-65 average...	58	896	1,741	260	7,484	95	169	10,703	13,590	24,293
1966...	56	790	1,642	242	7,700	100	176	10,706	12,000	22,706
1967...	38	689	1,986	225	7,694	71	171	10,874	11,900	22,774
1968...	23	769	1,936	238	8,520	48	138	11,672	12,700	24,372
1969...	30	672	1,480	249	8,640	50	135	11,256	11,900	23,156
Barley										
1961-65 average...	694	1,556	1,291	966	1,372	414	557	6,850	17,830	24,680
1966...	1,064	1,608	1,525	916	1,409	483	713	7,718	24,000	31,718
1967...	985	1,936	1,927	934	1,412	531	606	8,331	20,700	29,031
1968...	810	2,113	2,121	904	1,494	590	450	8,482	24,200	31,082
1969...	919	2,488	1,910	905	1,735	615	459	9,031	24,300	33,331
Oats										
1961-65 average...	141	792	850	96	2,654	154	343	5,030	5,300	10,330
1966...	182	746	703	72	2,625	170	386	4,884	7,500	12,384
1967...	169	968	845	86	2,818	163	363	5,412	9,700	15,112
1968...	76	869	864	68	2,891	114	295	5,177	9,700	14,877
1969...	78	967	742	79	2,810	161	308	5,145	9,960	15,105
Corn										
1961-65 average...	1,601	474	2	3,316	20	5,853	5,616	16,882	9,320	26,202
1966...	2,207	476	2	3,907	13	8,022	7,980	22,607	6,800	29,407
1967...	1,971	421	1	3,522	14	6,858	7,200	19,987	8,000	27,987
1968...	1,731	453	2	3,764	13	7,105	6,810	19,878	7,500	28,706
1969...	2,370	480	2	4,319	10	7,680	7,816	22,677	9,200	33,677
Total grain 2/										
1961-65 average...	4,744	5,498	5,846	6,682	15,054	10,887	10,337	59,048	106,200	165,248
1966...	6,754	5,867	5,917	7,495	15,923	13,899	13,907	69,762	145,881	215,643
1967...	6,477	6,530	7,354	7,814	16,459	13,512	13,206	71,352	124,950	196,302
1968...	5,201	7,357	7,830	8,367	18,208	12,769	12,092	71,824	141,840	213,664
1969...	5,962	7,887	6,745	9,179	8,745	12,923	13,648	75,089	132,400	207,489
Potatoes						,92				
1961-65 average...	400	5,635	12,066	1,735	43,802	3/2,600	3/2,708	68,946	73,465	142,411
1966...	421	5,846	12,823	2,433	46,144	3/3,352	3/3,230	74,249	79,068	153,317
1967...	381	6,037	14,065	1,507	48,620	3/3,096	3/2,800	76,506	85,918	162,424
1968...	360	6,526	12,639	1,335	50,817	3/3,706	3/2,890	78,273	91,966	170.239
1969...	328	5,010	9,000	1,613	45,400	3/2,229	3/3,144	66,724	82,500	149,224
Sugarbeets										
1961-65 average...	1,440	6,772	5,522	3,090	11,436	2,866	2,344	33,470	73,465	106,935
1966...	2,528	7,762	6,611	3,570	13,620	4,368	4,030	42,489	74,037	116,526
1967...	2,032	7,663	6,948	3,356	15,521	3,830	3,680	43,030	87,111	130,141
1968...	1,384	8,098	6,998	3,471	14,800	3,936	2,910	44,597	94,340	135,937
1969...	1,920	6,032	4,530	3,485	11,300	3,800	3,637	34,704	71,000	105,704
Cotton (unginned)										
1961-65 average...	39	---	---	---	---	---	7	46	4,995	5,041
1966...	69	---	---	---	---	---	6	75	5,981	6,056
1967...	56	---	---	---	---	---	10	66	5,970	6,036
1968...	33	---	---	---	---	---	9	42	5,948	5,990
1969...	47	---	---	---	---	---	8	55	5,710	5,765
Tobacco										
1961-65 average...	108	7	6	22	61	32	44	280	4/171	451
1966...	132	8	7	20	48	40	54	309	4/216	525
1967...	118	11	n.a.	24	78	35	54	n.a.	4/247	n.a.
1968...	112	10	n.a.	27	83	32	44	n.a.	4/261	n.a.
1969...	102	10	n.a.	29	64	34	42	n.a.	4/258	n.a.
Oilseeds 5/										
1961-65 average...	345	67	182	124	337	565	226	1,846	5,245	7,091
1966...	425	84	221	116	475	742	303	2,366	6,477	8,843
1967...	482	92	280	93	683	822	271	2,723	6,845	9,568
1968...	460	80	271	107	740	818	323	2,799	6,900	9,699
1969...	520	53	165	116	235	850	408	2,347	6,496	8,843

1/ 1969 data are preliminary. 2/ Includes buckwheat, millet, spelt, mixed grains, rice; also pulses in the USSR. 3/ Includes intercroppings. 4/ Procurement of tobacco and makhorka. 5/ Predominantly sunflower in Bulgaria, Hungary, Romania, Yugoslavia, and USSR; predominantly rapeseed in Czechoslovakia, East Germany and Poland. Oilseeds derived from fiber crops are not included.

Table 13.--Eastern Europe and Soviet Union: Livestock numbers, average 1961-65, annual 1966-70 1/

(January of each year)

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR	Total Eastern Europe and USSR
	1,000 head									
Cattle total										
1961-65 average...	1,517	4,466	4,605	1,943	9,353	4,639	5,451	31,974	83,500	115,474
1966...	1,450	4,389	4,762	1,919	9,480	4,935	5,584	32,519	93,436	125,955
1967...	1,385	4,462	4,918	1,968	10,002	5,198	5,710	33,643	97,111	130,754
1968...	1,363	4,437	5,018	2,049	10,123	5,332	5,693	34,015	97,167	131,182
1969...	1,297	4,249	5,109	2,017	10,530	5,136	5,261	33,599	95,735	129,334
1970...	1,250	4,200	5,140	1,900	10,290	5,033	5,010	32,823	95,065	127,888
Cows										
1961-65 average...	578	2,019	2,134	846	2/5,870	2,054	2,658	16,159	37,240	53,399
1966...	581	1,948	2,169	782	5,775	2,008	2,622	15,885	40,140	56,025
1967...	578	1,952	2,196	772	5,872	2,127	2,745	16,242	41,188	57,430
1968...	586	1,929	2,188	785	5,801	2,218	2,855	16,362	41,567	57,929
1969...	579	1,903	2,166	751	6,057	2,202	2,865	16,523	41,180	57,703
1970...	584	1,872	2,155	716	6,060	2,496	2,875	16,758	40,600	57,358
Hogs										
1961-65 average...	2,331	5,948	8,654	6,551	2/13,408	4,835	5,815	47,542	57,820	105,362
1966...	2,408	5,544	8,878	6,590	14,367	5,365	5,118	48,270	59,576	107,846
1967...	2,276	5,305	9,312	6,123	14,704	5,400	5,525	48,645	58,028	106,673
1968...	2,314	5,601	9,254	6,647	14,384	5,752	5,865	49,817	50,867	100,684
1969...	2,140	5,136	9,523	5,806	14,677	5,853	5,093	48,228	49,047	97,275
1970...	2,317	5,100	9,241	5,600	14,765	5,971	4,850	47,844	56,159	104,003
Sheep										
1961-65 average...	10,070	574	1,922	2,350	2/2,469	12,217	10,232	39,834	133,840	173,674
1966...	10,312	614	1,963	2,460	2,572	13,125	9,868	40,914	129,764	170,678
1967...	9,998	670	1,928	2,340	2,757	14,109	10,329	42,131	135,483	177,614
1968...	9,905	770	1,818	2,300	2,770	14,380	10,346	42,289	138,461	180,750
1969...	9,652	906	1,794	2,277	2,787	14,298	9,730	41,444	140,587	182,031
1970...	9,750	906	1,794	2,300	2,630	13,836	9,725	40,941	130,950	171,891
Goats										
1961-65 average...	315	588	404	74	237	576	3/	2,194	7,520	9,714
1966...	436	521	302	74	194	807	3/	2,334	5,552	7,886
1967...	409	477	278	78	181	828	3/	2,251	5,559	7,810
1968...	400	450	236	n.a.	175	732	3/	n.a.	5,580	n.a.
1969...	398	430	204	n.a.	n.a.	632	3/	n.a.	5,554	n.a.
1970...	392	410	170	n.a.	n.a.	540	3/	n.a.	5,400	n.a.
Horses										
1961-65 average...	279	261	373	378	2/2,562	838	1,170	5,861	8,960	14,821
1966...	240	188	272	307	2,495	689	1,131	5,322	8,000	13,322
1967...	229	177	250	292	2,518	705	1,134	5,305	8,000	13,305
1968...	224	166	219	276	2,525	715	1,126	5,251	8,000	13,251
1969...	199	156	188	249	2,649	702	1,109	5,252	8,000	13,252
1970...	190	150	160	230	2,620	680	1,090	5,120	8,000	13,120
Poultry										
1961-65 average...	22,188	28,785	37,241	4/28,388	78,917	39,022	30,205	264,746	502,700	767,446
1966...	20,845	27,752	37,988	4/28,589	80,288	40,084	31,685	267,231	490,500	757,731
1967...	23,637	29,466	37,070	4/32,184	81,026	43,966	35,153	282,502	516,200	798,702
1968...	27,726	31,208	37,976	4/31,093	80,117	47,148	35,974	291,242	528,200	819,442
1969...	24,874	32,544	38,802	4/28,120	84,269	47,618	37,142	293,369	543,000	836,869
1970...	24,800	32,700	38,800	28,000	84,000	47,400	37,885	293,585	540,000	833,585

1/ 1970 data are preliminary.
2/ 1963-65 average.
3/ No breakdown for goats; included in sheep numbers.
4/ March census.

n.a. = Not available.

Table 14.--Eastern Europe and Soviet Union: Production of principal livestock products, average 1961-65, annual 1966-69 1/

Commodity and year	Bulgaria 2/	Czecho-slovakia 3/	East Germany 4/	Hungary 3/	Poland 2/	Romania 4/	Yugo-slavia 3/ 5/	Total Eastern Europe 6/	USSR 7/	Total Eastern Europe and USSR 6/
	1,000 metric tons									
Beef and veal										
1961-65 average...	68	219	229	139	415	200	188	1,458	2,958	4,416
1966...	91	252	276	144	440	242	216	1,661	3,740	5,401
1967...	95	278	298	162	498	247	239	1,817	4,335	6,152
1968...	105	312	309	8/167	542	226	269	1,930	4,590	6,520
1969...	95	295	324	182	567	220	230	1,913	4,600	6.513
Mutton, lamb, goat-meat										
1961-65 average...	61	7	10	13	22	70	46	229	816	1,045
1966...	84	6	10	15	20	83	46	264	720	984
1967...	86	6	10	16	22	85	50	275	800	1,075
1968...	88	6	10	8/18	25	78	55	279	800	1,079
1969...	79	6	10	20	26	75	55	271	810	1,081
Pork										
1961-65 average...	149	391	682	294	1,226	308	294	3,344	2.835	6,179
1966...	181	415	818	310	1,345	374	287	3,730	3,375	7,105
1967...	178	417	842	297	1,313	422	309	3,778	3,375	7,153
1968...	194	444	874	8/335	1,286	421	323	3,877	3,075	6,952
1969...	175	423	888	312	1,340	416	290	3,844	3,060	6,904
Poultry meat										
1961-65 average...	39	51	62	131	78	75	71	477	740	1,217
1966...	48	57	65	151	104	97	88	610	700	1,310
1967...	62	65	69	163	107	102	95	663	800	1,463
1968...	64	8/81	74	8/165	114	100	107	705	800	1,505
1969...	58	87	86	178	120	119	110	758	800	1,558
Total meats										
1961-65 average...	321	683	1,001	586	1,779	653	602	6,525	7,349	12,974
1966...	407	742	1,183	624	1,945	796	638	6,335	8,725	15,060
1967...	421	778	1,230	642	1,974	856	694	6,595	9,412	16,012
1968...	453	8/853	1,278	8/687	2,005	825	755	6,856	9,358	16,121
1969...	409	801	1,320	694	2,093	830	686	6,833	9,355	16,188
Milk 9/										
1961-65 average...	1,235	3,766	5,704	1,825	12,849	2,680	2,417	30,476	58,242	88,718
1966...	1,501	4,169	6,728	1,851	14,235	3,092	2,696	34,272	68,393	102,665
1967...	1,610	4,335	6,904	1,977	14,494	3,391	2,796	35,507	71,928	107,435
1968...	1,586	4,559	7,227	1,933	14,642	3,134	2,821	35,902	73,890	109.792
1969...	1,578	4,741	7,314	1,928	14,690	3,250	2,860	36,361	73,440	109.801
Wool										
1961-65 average...	24	2	8	10	8	24	13	89	362	451
1966...	26	2	8	10	8	26	13	93	371	464
1967...	27	3	8	10	9	29	14	100	394	494
1968...	29	3	8/8	11	9	31	14	105	413	518
1969...	30	4	8	11	9	28	13	103	390	493
Butter 10/										
1961-65 average...	11	74	175	17	92	17	17	403	861	1,264
1966...	12	84	206	19	118	28	17	484	1,042	1,526
1967...	13	82	209	23	119	30	17	493	1,060	1,553
1968...	12	87	220	22	124	29	8/17	511	1,044	1,555
1969...	14	90	224	21	117	27	18	511	1,040	1,551
	Millions									
Eggs										
1961-65 average...	1,348	2,589	3,517	2,006	6,050	2,502	1,601	19,613	28,736	48,349
1966...	1,490	3,080	3,894	2,436	6,253	2,814	1,996	21,963	31,672	53,635
1967...	1,683	3,218	3,995	2,714	6,348	3,011	2,126	23,095	33,921	57,016
1968...	1,618	3,270	4,046	2,792	6,315	3,113	2,186	23,340	35,522	58,862
1969...	1,580	3,410	4,050	2,600	6,400	3,200	2,400	23,640	37,000	60,640

1/ 1969 data are preliminary. 2/ Official meat data are in carcass weight including fats. 3/ Official meat data are in dressed carcass weight excluding fats. 4/ Meat data are estimated in carcass weight including fats; in Romania, growth in herds also is included. 5/ Meat data exclude exports of animals for slaughter. 6/ Meat weight specifications vary from country to country. Despite this fact, data are added. 7/ Meat data are estimated in dressed carcass weight excluding fat. 8/ Estimate. 9/ Cows milk only for Czechoslovakia, East Germany, Hungary, and Poland. In East Germany, milk production is given in 3.5 percent fat content equivalent. 10/ Total production in East Germany and Yugoslavia; factory production in all other countries.

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
BULGARIA							
Imports:							
Meat, fresh, frozen, and chilled	1.5	8.1	6.7	15.1	8.5	25.6	n.a.
Wheat	119.9	193.1	407.8	149.0	314.6	13.0	232.8
Rice, milled	13.0	25.3	52.0	25.9	18.9	16.1	n.a.
Barley	55.5	95.4	162.9	133.4	---	---	n.a.
Corn	37.2	105.1	107.7	28.7	76.4	26.4	n.a.
Sugar, refined	124.1	117.6	131.0	154.6	158.1	194.7	285.3
Cattle hides, undressed	2.5	3.6	3.3	2.8	8.1	3.5	n.a.
Rubber, crude	17.0	18.2	22.9	21.8	24.6	25.5	32
Wool, scoured	1.1	1.7	2.2	1.5	2.2	2.4	3.1
Cotton, lint	47.5	31.8	45.1	47.8	54.0	50.7	58
Exports:							
Calves 1/	3.4	7.9	33.6	84.9	63.0	69.9	n.a.
Hogs, for slaughter 1/	138.6	91.5	115.2	321.6	379.4	127.6	n.a.
Pork	10.0	4.5	1.4	8.3	12.3	14.4	n.a.
Poultry meat	6.8	6.6	7.5	9.7	10.1	17.0	n.a.
Cheese	10.5	4.0	11.4	15.1	12.3	22.7	n.a.
Eggs 2/	442.2	331.2	400.7	508.0	479.8	580.0	556
Wheat	2.0	28.2	7.0	9.5	400.2	533.8	n.a.
Corn	82.7	73.5	244.9	43.4	186.7	306.3	n.a.
Fruit, fresh 3/	260.9	291.7	230.5	352.1	192.5	223.5	215
Fruit, canned	39.5	47.2	52.6	51.2	47.4	66.1	70
Jams and jellies	46.2	51.5	45.5	39.5	28.9	18.2	24
Fruit puree	49.9	39.8	48.9	32.3	24.9	23.9	n.a.
Vegetables, fresh 4/	317.6	286.2	327.2	226.4	218.0	246.0	244
Vegetables, canned	87.3	81.0	93.6	93.5	134.5	144.3	129
Tomato puree	38.4	34.6	33.8	36.1	43.9	33.8	n.a.
Wine, grape 5/	380	530	521.2	545.7	899.8	894.2	940
Tobacco, oriental	52.6	77.7	81.5	78.2	71.7	75.6	68
Sunflowerseed	92.4	32.8	111.4	91.5	155.8	99.9	n.a.
Cotton, lint	---	---	0.2	2.6	7.2	17.5	n.a.
Sunflowerseed oil	10.2	13.4	5.1	1.0	17.3	40.5	n.a.
CZECHOSLOVAKIA							
Imports:							
Meat and slaughter animals	89	96	62	48	75	81	83
Poultry meat	9.2	8.4	9.6	7.8	8.7	7.6	5.8
Butter	15	20	10	12	11	13	13
Eggs 2/	32	23	61	48	64	70	68
Wheat	927	1,365	1,489	924	1,032	1,205	1,371
Rice, milled	82	88	89	73	92	60	68
Barley	144	156	396	595	135	162	125
Corn	300	289	433	155	282	138	263
Rye	172	62	41	32	n.a.	n.a.	---
Fruits	158	159	184	241	190	241	234
Nuts	5.1	7.8	6.5	6.6	7.7	7.8	7.2
Vegetables	137	119	112	144	132	149	118
Sugar, raw equivalent	150.0	150.0	50.1	209.5	263.2	188.0	202.2
Coffee	8.8	11.5	11.0	10.3	10.6	11.6	13.3
Cocoa beans	12.2	13.0	12.8	14.1	19.3	15.5	12.8
Tea	1.2	1.7	1.7	1.4	1.9	0.9	1.1
Oilseed cake and meal	56.0	102.8	176.6	168.4	204.7	250.3	n.a.
Wine 5/	390	384	474	471	468	498	534

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
CZECHOSLOVAKIA--Continued							
Imports--Continued							
Tobacco	13	13	18	17	13	18	22
Cattle hides, raw	42	37	40	44	44	40	40
Peanuts	32	46	42	37	53	26	33
Soybeans	23	21	26	25	26	22	22
Sunflowerseed	66	33	33	17	43	59	86
Wool, scoured	20	20	21	23	21	17	17
Cotton, lint	92	105	106	100	113	103	107
Jute	18	20	14	14	15	15	16
Exports:							
Meat, fresh, frozen, and chilled	2.1	2.3	3.9	28.1	8.0	17.2	n.a.
Eggs 2/	54	99	74	66	60	41	47
Malt	155	178	157	178	192	205	207
Hops	3.7	4.9	5.4	4.7	5.0	5.3	5.3
Sugar, refined	528	513	359	513	325	392	287
Beer 5/	465	445	326	321	542	750	841
EAST GERMANY 6/							
Imports:							
Meat and meat products	202.2	139.1	106.1	76.6	78.4	75.3	68.8
Butter	55.7	43.8	31.2	29.2	18.5	17.2	18.2
Cheese	18.2	16.8	16.5	14.0	14.3	12.5	10.8
Eggs and egg products 2/	55.3	164.8	113.3	19.5	40.1	63.3	43.5
Wheat	1,238.0	1,023.0	1,303.0	1,225.0	1,350.0	1,184.0	1,075.0
Rice	30.4	30.3	26.8	40.4	62.0	49.8	46.7
Barley	141.0	89.0	219.0	289.0	126.0	203.0	168.0
Corn	412.0	287.0	309.0	183.0	295.0	352.0	394.0
Rye	448.0	282.0	101.0	1.0	111.0	---	---
Fruit, tropical	100.2	83.3	94.5	114.3	152.3	199.0	163.5
Fruit, fresh	110.9	153.2	178.7	169.1	137.0	139.3	130.2
Nuts	11.5	9.8	10.0	13.1	15.5	13.6	25.2
Fruit juice	11.6	13.5	14.0	9.6	13.2	11.4	16.2
Fruit, canned	19.6	18.5	38.5	30.7	33.3	30.3	38.3
Potatoes	129.1	128.2	409.8	84.4	93.2	107.6	141.0
Pulses, for food	7.2	8.3	22.8	5.8	10.3	11.3	10.2
Vegetables, fresh	94.6	130.5	148.8	88.6	104.2	90.3	92.8
Vegetables, canned	24.6	33.2	92.2	57.4	57.3	78.1	61.9
Sugar, raw equivalent	321.2	244.5	81.1	169.9	207.2	322.9	298.2
Honey	2.2	1.7	2.9	1.8	2.5	2.9	2.7
Coffee	29.0	34.4	36.5	35.8	37.4	40.2	40.2
Cocoa beans	13.9	14.1	14.4	15.3	18.0	16.2	19.1
Tea	1.8	1.4	1.4	1.9	1.1	1.2	1.5
Forage 7/	6.9	10.0	11.8	10.3	13.2	9.1	8.8
Oilseed cake and meal	59.8	125.6	213.5	199.2	236.1	345.1	379.3
Wine and champagne 5/	647.1	705.9	642.5	676.3	782.1	852.4	807.9
Beer 5/	77.9	78.2	78.6	78.1	80.8	82.1	82.5
Spirits 5/	18.0	6.9	10.0	6.3	51.4	35.6	35.5
Tobacco, smoking and cured	24.2	29.2	27.2	27.8	22.5	26.1	21.3
Cattle hides and skins, salted	8/24.3	20.1	21.0	19.2	18.4	17.2	14.6
Oilseeds	108.2	137.3	154.6	139.6	163.6	148.4	132.2
Wool, scoured	21.2	23.3	22.3	24.7	18.8	19.2	21.8
Cotton, lint	123.6	93.5	96.2	99.3	90.3	84.7	87.2

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
EAST GERMANY 6/--Continued							
Imports--Continued							
Animal fats, refined and unrefined	10.4	3.2	2.2	---	---	0.3	---
Vegetable oils, refined and unrefined	148.8	136.3	119.1	106.1	120.3	110.7	112.1
Exports:							
Meat, fresh	0.5	10.8	33.7	21.0	18.9	22.8	n.a.
Sugar, refined	213.1	195.7	172.9	97.5	191.0	145.6	155.2
HUNGARY							
Imports:							
Meat, fresh	20.2	37.0	43.4	34.2	31.0	58.2	18.1
Meat, canned	0.2	1.4	1.2	3.5	2.6	1.2	1.8
Butter	4.5	2.9	0.9	5.7	4.5	5.4	2.5
Wheat, including feed wheat	172.7	363.4	303.9	207.7	152.4	217.0	310.5
Rice, husked and broken	17.4	18.8	11.2	21.4	40.6	24.6	17.6
Barley	54.5	118.0	100.4	382.0	40.7	10.2	73.9
Corn	429.2	161.9	140.2	70.8	55.8	0.2	75.4
Rye	---	28.7	3.8	---	---	50.0	---
Flour and grits	39.6	22.4	55.2	8.8	5.7	---	---
Fruit, tropical	38.7	31.4	42.3	40.8	47.1	48.8	61.8
Coffee	5.5	6.9	11.0	12.6	13.5	17.4	20.5
Cocoa beans	6.3	7.2	7.0	12.5	9.8	9.8	10.9
Tea	0.6	0.8	0.5	2.2	0.8	0.6	0.9
Oilseed cake and meal	121.9	161.7	186.7	183.7	228.7	245.3	266.7
Lard, rendered	7.2	14.6	14.9	5.4	6.5	25.6	7.2
Tobacco	6.5	4.6	5.0	4.9	8.1	15.6	12.3
Hides and skins	19.1	18.8	21.4	24.6	24.1	24.4	25.2
Wool, scoured	2.7	4.0	3.7	2.8	4.0	4.8	6.7
Cotton, lint	65.1	63.6	68.4	72.1	78.2	88.6	74.8
Jute	9.3	8.0	9.1	8.8	12.1	6.5	9.8
Exports:							
Cattle, for slaughter	50.2	72.5	54.9	71.8	80.7	91.9	95.6
Hogs, for slaughter	18.1	17.9	6.1	28.8	28.3	9.7	5.9
Meat, fresh	41.9	37.8	32.2	41.0	49.7	48.8	47.7
Meat, canned	4.8	4.9	5.6	7.5	6.5	7.9	8.1
Poultry, dressed	26.4	27.2	34.0	35.5	33.7	38.5	47.2
Butter	4.7	5.4	4.4	5.9	5.1	10.6	6.0
Cheese	7.2	8.8	8.4	6.2	7.5	9.3	6.0
Eggs 2/	60.1	90.6	197.6	344.3	287.7	423.4	364.5
Wheat	31.9	41.6	13.9	96.2	1.0	170.5	115.3
Corn	34.2	25.5	63.9	92.6	42.7	19.7	18.6
Flour and grits	11.9	12.3	12.0	10.8	12.6	13.7	13.9
Fruit, fresh	87.7	183.4	177.6	182.1	180.5	243.7	207.6
Fruit, canned	35.9	41.9	45.0	52.4	52.2	52.9	58.3
Potatoes	24.3	42.6	37.9	30.8	37.2	113.8	32.4
Beans	4.6	15.4	11.7	28.3	6.6	8.7	1.5
Peas	30.5	20.8	17.1	28.8	19.5	25.6	11.6
Vegetables, fresh	98.7	137.9	107.4	114.0	147.4	122.9	86.4
Vegetables, canned	70.2	94.5	134.2	124.4	154.5	184.9	183.5
Sugar, refined	214.8	222.9	147.0	138.6	63.3	42.2	16.6
Honey	4.6	4.3	4.6	5.0	5.0	5.7	5.8
Wine 5/	335.2	401.8	569.4	689.0	720.0	728.2	788.4
Tobacco	4.0	4.0	9.7	9.5	7.2	10.7	6.6
Sunflowerseed	15.4	16.8	14.3	10.4	13.7	14.0	18.2

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
HUNGARY--Continued							
Exports--Continued							
Sunflowerseed oil, refined	22.0	25.5	19.5	14.0	14.1	29.4	32.3
POLAND							
Imports:							
Meat and meat products	5.0	47.6	37.7	39.4	52.8	43.2	79.0
Butter	---	4.7	8.4	2.4	---	3.0	9.4
Wheat	1,503.8	1,673.4	2,211.4	1,378.2	1,566.7	1,353.0	1,067.7
Rice, milled	51.4	99.2	54.9	67.2	67.2	65.3	59.0
Barley	277.6	431.9	287.2	485.3	139.2	417.6	545.4
Corn	144.8	99.4	186.1	784.5	187.6	199.8	295.3
Rye	247.2	409.1	---	---	70.3	---	63.9
Oats	---	5.0	13.8	32.9	---	---	---
Fruit, citrus	35.0	33.7	38.9	60.1	85.8	75.9	84.6
Fruit, fresh	45.4	36.0	6.0	35.2	26.7	35.2	32.7
Fruit, dried	6.0	4.5	5.0	5.4	6.7	5.3	6.7
Vegetables, fresh	58.0	28.4	25.4	37.2	30.3	31.8	53.1
Vegetables, canned and frozen	9.3	9.4	1.7	3.3	8.6	5.3	6.8
Coffee beans	7.2	8.9	10.9	15.4	19.5	20.1	27.8
Cocoa beans	11.5	12.2	14.0	17.3	12.3	20.0	22.6
Tea	4.1	4.9	4.7	5.7	7.7	7.3	6.5
Oilseed cake and meal	77.7	98.8	164.7	157.8	184.1	215.5	299.0
Tobacco	15.1	19.3	15.8	16.6	13.8	10.7	5.5
Cattle hides, green	37.7	31.2	32.7	34.3	47.2	52.1	41.2
Oilseeds	32.6	59.1	61.3	141.9	69.3	67.6	52.0
Rubber, crude	38.9	35.2	42.1	38.8	45.1	43.5	46.8
Wool, scoured	18.5	14.9	15.7	17.3	15.2	16.5	17.1
Cotton, lint	120.6	122.7	151.9	142.8	156.0	133.4	156.4
Vegetable oils, edible	51.8	12.4	68.0	31.9	24.0	50.5	45.5
Exports:							
Cattle, for slaughter 9/	8.8	8.7	12.3	16.2	12.1	4.0	4.3
Hogs, for slaughter 9/	45.5	8.6	9.1	9.2	2.4	1.9	0.3
Meat, frozen	67.9	33.2	22.4	64.0	18.6	31.7	33.7
Poultry meat	13.7	12.1	15.9	19.2	18.8	17.3	18.0
Bacon	50.6	50.8	52.2	51.9	52.4	54.9	53.8
Ham, canned	16.8	17.7	19.8	22.3	23.2	24.4	24.1
Meat, canned	20.6	23.3	24.0	25.6	27.3	27.8	29.2
Butter	27.5	18.6	20.0	18.3	19.3	23.4	19.6
Eggs 2/	1,218.5	783.4	637.5	750.6	513.5	551.2	326.8
Barley	35.2	59.9	59.9	56.9	89.6	57.7	31.9
Rye	---	---	---	---	19.5	65.5	23.7
Potatoes	381.2	248.7	1,015.3	532.8	453.3	423.7	529.4
Vegetables, fresh	22.5	65.1	103.1	92.0	74.4	53.1	70.0
Sugar, raw	150.5	53.3	145.2	90.1	100.9	140.8	162.6
Sugar, refined	468.8	160.1	358.3	383.3	227.5	214.9	485.8
Lard	23.2	4.3	0.4	5.4	27.4	16.0	0.5
Beer 5/	68.5	61.0	150.3	203.6	182.6	142.3	172.2
Rapeseed	---	4.5	---	60.4	88.1	106.2	175.4
ROMANIA							
Imports:							
Rice	23.1	43.1	29.2	36.7	29.5	32.0	29.7
Fruit, citrus	21.1	19.6	20.0	22.0	26.2	30.1	27.3

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
ROMANIA--Continued							
Imports--Continued							
Olives	6.1	8.1	6.4	6.9	5.3	5.8	5.5
Sugar, refined	37.0	44.9	---	---	---	---	50.5
Cocoa (including powdered cocoa)	2.5	3.8	3.7	5.4	5.1	5.4	7.1
Hides and skins	13.6	6.5	12.2	14.4	20.8	21.8	18.3
Rubber, crude	13.8	19.2	22.3	19.2	24.9	26.7	30.5
Wool, scoured	0.3	0.3	0.8	1.4	1.5	1.8	2.0
Cotton, lint	60.8	65.4	66.6	67.0	76.7	71.9	76.1
Vegetable oils, edible	1.5	0.8	2.0	0.8	2.9	2.1	5.4
Exports:							
Animals, for slaughter 1/	2.2	2.5	4.0	28.4	98.0	62.5	n.a.
Meat, fresh	13.5	13.8	16.6	33.2	31.1	56.8	n.a.
Meat, prepared or preserved	1.8	1.6	2.0	2.4	4.8	7.4	n.a.
Butter	2.5	6.0	5.1	5.6	10.4	15.0	n.a.
Eggs 2/	131.6	81.2	148.3	245.8	286.2	290.0	311.8
Grain, total (excluding seed)	1,067.9	1,408.8	1,234.2	882.2	1,303.0	2,339.4	1,561.6
Grapes	54.9	52.0	40.7	60.3	37.8	46.3	48.6
Fruit, fresh	42.8	69.0	53.6	96.5	54.6	67.0	64.6
Fruit, canned	75.9	107.6	93.7	86.0	97.2	100.8	83.8
Potatoes	20.9	38.1	8.5	11.1	21.1	31.4	27.7
Vegetables, fresh	71.1	82.1	105.4	136.8	127.6	127.1	193.9
Vegetables, canned	15.4	20.7	29.5	25.9	35.9	40.5	48.7
Sugar, refined	310.8	75.6	52.9	34.5	106.0	192.2	63.3
Wine	20.7	26.8	42.4	43.3	46.0	52.7	57.9
Sunflowerseed	15.0	15.0	40.0	35.0	30.9	58.6	61.9
Wool, scoured	0.9	1.0	0.9	1.1	1.6	1.5	2.4
Animal fats, edible	8.8	7.9	12.0	19.3	44.3	48.6	46.9
Vegetable oils, edible	47.6	39.7	37.1	33.3	76.5	110.0	115.8
YUGOSLAVIA							
Imports:							
Hogs, for slaughter	22.5	9.0	11.6	21.5	27.6	6.8	---
Meat, fresh	0.2	1.0	0.2	1.3	9.7	32.9	5.6
Milk, powdered	18.1	23.1	19.7	13.3	14.2	2.7	16.7
Eggs	3.6	3.8	3.8	4.0	10.5	9.7	1.1
Wheat	732.9	1,438.3	602.4	1,192.6	1,357.2	409.0	78.7
Rice, milled	4.1	38.9	36.9	26.4	27.3	9.7	27.9
Barley	13.8	69.0	61.1	1.1	0.6	---	---
Corn	60.4	32.7	116.0	0.7	---	---	2.5
Fruit, citrus	39.8	39.4	62.6	66.3	82.9	98.6	84.9
Potatoes	22.8	7.7	0.7	24.2	14.6	0.3	---
Sugar, refined	131.4	54.6	106.3	94.2	246.2	131.2	67.7
Coffee	10.3	17.8	15.7	17.7	24.7	30.3	29.0
Cocoa beans	3.6	9.6	6.7	13.8	13.9	8.9	9.7
Oilseed cake and meal	50.3	80.5	147.3	137.9	74.7	155.9	121.5
Lard	2.2	7.4	9.4	0.4	2.4	11.4	9.1
Tobacco	9.9	10.1	3.4	0.1	1.0	---	0.1
Hides, raw	20.6	22.4	27.4	25.1	26.7	35.7	21.5
Oilseeds	21.6	29.4	35.2	28.2	26.2	7.5	30.8
Rubber, crude	13.9	15.1	17.0	16.5	15.4	14.4	15.7
Wool, greasy	5.9	11.3	14.6	16.1	11.4	12.6	12.7
Cotton, lint	64.2	72.2	81.7	90.5	87.4	90.7	72.0
Jute	11.1	15.0	12.2	13.6	13.9	8.7	10.7

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
YUGOSLAVIA--Continued							
Imports--Continued							
Tallow	15.2	11.8	6.0	16.1	0.3	12.4	24.2
Vegetable oils, edible	41.4	30.4	54.5	19.1	21.8	92.1	46.9
Exports:							
Cattle, for slaughter	37.0	44.5	19.1	11.2	21.9	33.9	33.2
Sheep, for slaughter	8.7	7.2	0.4	1.9	3.4	5.5	9.0
Hogs, for slaughter	1.1	0.1	---	0.4	0.2	0.6	0.1
Horses, for slaughter	29.1	27.7	16.8	11.9	16.3	23.6	20.8
Meat, fresh	79.6	70.4	111.2	126.0	112.6	103.6	94.7
Meat, canned	21.1	23.8	30.4	36.9	23.8	24.2	19.8
Cheese	8.8	0.5	0.9	1.2	1.8	1.2	0.5
Eggs	6.2	5.1	3.6	2.0	4.6	2.5	0.2
Barley	15.1	---	14.1	36.6	85.1	101.8	21.1
Corn	27.8	104.3	17.7	51.4	356.9	786.7	388.8
Fruit, fresh	71.7	33.6	61.2	35.2	19.5	29.1	14.5
Prunes	14.6	33.0	17.6	13.0	4.9	7.3	14.5
Fruit pulp	16.2	16.0	13.7	13.2	13.2	13.6	12.5
Potatoes	0.2	0.7	0.3	0.3	9.6	3.4	1.2
Beans, dry	0.8	0.3	0.4	7.8	7.6	11.1	9.0
Hops	3.9	4.7	4.8	4.9	4.4	4.3	4.0
Sugar, refined	21.2	25.0	12.3	---	2.2	11.8	13.2
Wine	50.0	43.3	49.6	40.0	37.0	44.1	29.8
Tobacco	15.3	16.8	22.7	23.2	20.9	19.2	15.9
Oilseeds	1.7	3.8	7.2	13.0	4.6	9.7	19.2
Hemp, all	10.3	13.5	10.4	8.8	3.7	4.6	4.8
SOVIET UNION							
Imports:							
Cattle, for slaughter	94.3	77.3	73.2	91.5	107.4	91.8	67.4
Hogs, for slaughter	21.2	---	0.4	21.4	---	---	---
Horses, for slaughter	---	6.7	5.4	5.6	8.6	10.2	13.0
Meat and meat products	149.1	37.4	119.9	252.2	133.2	57.5	59.6
Eggs 2/	66.3	76.7	532.0	706.1	609.3	749.0	672.4
Wheat	45.1	3,052.5	7,281.4	6,375.1	7,582.8	1,827.8	1,339.7
Rice, milled	337.5	193.6	363.1	237.9	275.4	397.3	260.0
Corn	---	---	---	---	163.5	356.8	264.2
Flour, wheat	22.1	277.2	972.0	289.1	322.4	211.8	263.4
Fruit, fresh	345.6	407.2	439.6	500.9	447.3	538.8	527.1
Fruit, dried	77.2	113.4	76.6	85.3	69.4	100.4	107.6
Vegetables, fresh	10/132.9	174.7	243.1	167.8	139.0	151.0	169.4
Vegetables, canned	89.9	108.3	158.6	127.6	203.4	239.9	210.9
Sugar, raw	2,233.2	996.4	1,859.3	2,330.7	1,840.9	2,479.7	1,752.2
Coffee	22.6	29.7	30.3	30.9	28.3	24.7	31.4
Cocoa beans	48.7	54.0	66.2	88.8	56.5	81.7	109.0
Tea	16.1	21.7	32.5	36.3	21.3	23.1	22.7
Tobacco	66.6	93.4	129.1	104.1	65.2	61.0	62.3
Hides and skins 11/	19.5	26.4	28.9	22.8	26.9	30.2	24.2
Oilseeds	57.3	65.2	75.2	156.8	48.9	44.2	56.2
Rubber, crude	361.7	298.4	186.1	271.2	311.1	278.5	325.9
Wool, scoured	48.6	42.4	46.3	52.8	61.3	49.8	70.8
Cotton, lint	150.2	225.6	144.9	182.9	172.7	144.5	136.8
Vegetables oils, edible	15.1	37.3	43.2	68.1	47.4	27.7	41.2

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	- - - - - - - - - - - - 1,000 metric tons - - - - - - - - - - - -						
SOVIET UNION--Continued							
Exports:							
Meat and meat products	133.7	183.0	60.9	31.7	118.4	175.4	130.6
Butter	69.7	65.0	25.3	43.0	54.1	63.4	75.6
Wheat	4,765.2	4,105.6	2,030.5	1,662.6	2,805.3	5,284.0	4,355.0
Barley	466.8	594.2	665.8	2,067.9	290.4	452.4	614.4
Corn	1,256.7	723.1	638.6	551.1	174.4	164.7	209.0
Rye	1,300.3	815.0	150.3	36.9	275.1	336.2	221.9
Oats	25.3	22.0	28.3	11.8	11.5	10.7	6.1
Flour	251.4	276.4	320.5	266.7	305.6	376.8	564.4
Sugar, refined	792.4	802.4	347.8	604.1	992.8	1,032.3	1,299.6
Oilseed cake and meal	348.6	193.2	45.5	129.2	390.5	387.9	325.1
Tobacco	1.8	1.8	3.2	2.1	1.3	2.0	4.3
Oilseeds	112.7	101.2	113.5	88.2	147.2	341.2	404.8
Wool, scoured	24.2	27.6	24.4	26.4	27.8	20.1	26.0
Cotton, lint	343.6	321.5	393.6	457.7	507.8	534.4	554.4
Vegetable oils, edible	152.5	258.9	189.9	242.1	455.7	707.2	770.4
MAINLAND CHINA							
Imports:							
Wheat	4,419.1	4,394.0	5,542.2	5,249.8	6,375.2	3,871	4,444.3
Rice	4.7	97.1	76.4	112.3	51.5	22.4	n.a.
Barley	486.6	25.0	567.5	23.6	---	---	n.a.
Corn	491.2	13.4	377.2	71.8	20.2	136.5	n.a.
Rye	246.9	---	---	---	---	---	n.a.
Oats	47.4	26.9	134.6	41.9	---	---	n.a.
Cereals, unmilled, n.e.s.	23.5	---	29.3	---	---	---	n.a.
Flour	223.9	0.7	54.7	16.9	---	---	n.a.
Dates	63.0	71.3	62.1	35.3	59.8	59.5	n.a.
Sugar, raw equivalent	937.9	511.9	407.6	419.1	619.7	556.1	431.8
Cotton, raw	67.5	143.1	105.2	168.5	107.0	88.2	68.1
Jute	13.0	22.9	56.7	60.6	52.2	63.6	n.a.
Sisal	2.7	3.8	9.6	7.2	13.1	6.3	n.a.
Fats and oils, animal	27.6	21.6	30.1	17.7	15.2	11.9	n.a.
Exports:							
Cattle, for slaughter 1/	17.1	23.7	46.1	94.8	6.2	111.4	116.9
Sheep and goats, for slaughter 1/	---	---	7.8	12.4	10.9	8.6	n.a.
Hogs, for slaughter 1/	785.6	1,285.5	1,717.3	1,879.2	1,951.5	1,816.0	1,960.0
Meat, fresh	10.6	23.6	76.5	139.5	169.5	108.9	n.a.
Meat, dried and salted	2.3	2.0	3.1	4.5	4.8	10.7	n.a.
Meat, prepared or preserved	6.0	8.3	23.9	39.3	41.8	20.7	n.a.
Eggs, in shell	25.8	34.8	40.0	42.4	49.4	41.2	n.a.
Eggs, not in shell 12/	11.9	28.0	15.5	60.0	72.5	60.2	n.a.
Wheat, unmilled	89.1	109.9	110.8	---	---	---	n.a.
Rice	577.8	639.7	784.5	750.5	1,209.6	1,224.8	998.0
Corn	0.8	109.6	169.6	244.5	146.3	75.2	n.a.
Oranges and tangerines	29.9	37.3	38.8	39.3	42.8	55.8	n.a.
Fruit, other citrus	2.8	2.8	4.2	6.8	7.4	5.1	n.a.
Bananas, fresh	12.5	8.7	17.0	19.0	32.2	25.0	n.a.
Apples, fresh	62.4	71.0	81.1	88.8	89.4	90.8	n.a.
Pears, fresh	0.5	1.9	16.5	28.7	36.4	33.9	n.a.
Potatoes, fresh	7.5	11.2	25.4	34.2	53.6	41.8	n.a.
Beans and peas	58.1	57.8	62.5	101.9	148.0	128.6	n.a.
Onions, fresh	5.0	6.7	12.1	15.4	23.1	16.8	n.a.
Sugar, raw equivalent	284.5	217.0	361.7	419.3	522.8	388.0	n.a.

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam: Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
MAINLAND CHINA--Continued							
Exports--Continued							
Tea	27.8	27.7	32.4	32.1	35.4	31.1	n.a.
Oilseed cake	4.5	9.2	19.4	29.3	25.8	31.6	n.a.
Peanuts	3.1	3.1	25.5	45.7	63.8	74.1	n.a.
Soybeans	342.2	332.1	498.4	576.2	550.1	564.4	620.5
Castor seed	1.9	5.3	10.7	14.6	56.3	79.6	n.a.
Rape and mustard seed	---	0.2	---	5.8	29.9	23.3	n.a.
Silk, fiber	1.1	1.2	1.8	3.3	6.0	5.7	n.a.
Wool, greasy	4.7	10.6	14.3	15.6	17.6	11.3	n.a.
Cottonseed oil	---	---	---	22.2	43.6	28.6	n.a.
Peanut oil	0.7	0.3	0.5	4.9	24.3	30.9	n.a.
Rape and mustard oil	---	---	---	3.8	31.8	17.1	n.a.
Tung oil	16.5	12.4	17.1	19.1	17.5	14.6	n.a.
NORTH KOREA							
Imports:							
Wheat, unmilled	84.1	96.1	43.6	101.2	339.8	358.3	n.a.
Flour and meal, wheat	7.8	---	---	20.5	63.1	116.8	n.a.
Sugar, raw equivalent	14.3	20.0	21.1	21.5	21.3	112.9	n.a.
Cotton, lint	10.8	10.0	9.5	10.7	10.9	11.7	n.a.
Sunflowerseed oil	---	---	---	---	3.5	5.7	n.a.
Exports:							
Rice	0.3	---	---	43.5	72.1	125.4	n.a.
Corn	12.7	37.0	23.5	---	18.0	6.3	n.a.
Tobacco	10.3	7.7	3.7	8.1	5.1	1.8	n.a.
Silk, fiber	0.3	0.2	0.4	0.5	0.5	0.3	n.a.
NORTH VIETNAM							
Imports:							
Flour and meal, wheat	9.1	17.1	6.5	1.5	10.7	39.4	n.a.
Sugar, raw equivalent	10.5	13.4	10.5	66.0	13.5	45.5	49.8
Exports:							
Hogs 1/	7.1	5.0	12.5	16.9	4.7	1.6	n.a.
Rice	5.9	6.9	10.9	3.0	12.5	3.3	n.a.
Sugar, raw equivalent	3.3	4.7	3.2	6.6	2.0	3.2	n.a.

1/ 1,000 head. 2/ Millions, fresh equivalent. 3/ Includes watermelons and musk melons. 4/ Includes potatoes. 5/ 1,000 hectoliters. 6/ Interzonal trade between East and West Germany not included. 7/ Unspecified. Believed to include hay, fodder, and forage crops. 8/ Includes other hides. 9/ Slaughter weight. 10/ Tomatoes, only. 11/ Millions. 12/ In terms of in-shell equivalent.

Sources: Official statistical handbooks published by the various countries except Mainland China, North Korea, and North Vietnam. Some data for Bulgaria, Czechoslovakia, East Germany, Romania, and Yugoslavia from Trade Yearbook, FAO, Vol. 22, 1968. Some data for Romania, and most data for Mainland China, North Korea, and North Vietnam from Supplementary Economic Statistics, Fifth Issue, FAO, October 1969. Some data for Bulgaria, Czechoslovakia, East Germany, Mainland China, and North Vietnam from Sugar Yearbook, 1968, International Sugar Council.

Table 10.--Eastern Europe and the Soviet Union: Agriculture in the economy and major agricultural inputs, by country, 1968

Item	Unit	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugoslavia	USSR
Agriculture in the economy:									
Share of national income 1/	Percent	2/30	10	14	23	20	26	26	22
Share of exports 3/	Do.	47	9	4/3	23	17	34	22	15
Share of imports 3/	Do.	12	27	4/30	22	22	12	14	18
Rural population 5/	Do.	53	n.a.	n.a.	56	49	61	50	44
Inputs in agriculture:									
Land:									
Agricultural land	Mil. ha.	5.9	7.1	6.3	6.9	19.8	15.0	14.7	608.3
Arable land 6/	Do.	4.5	5.3	4.9	5.6	15.5	10.6	8.2	229.0
Labor:									
Agricultural labor force 7/	Millions	1.8	1.4	1.2	1.5	6.2	6.4	4.5	2/42.6
Share of total labor force 7/	Percent	42	20	15	29	38	55	49	2/35
Arable land per worker	Hectares	2.5	3.8	4.0	3.7	2.5	1.6	1.8	2/5.3
Tractors 8/:									
Tractors, physical units	Thousand	2/47	n.a.	144	9/64	170	96	44	1,821
Tractors, 15 h.p. units	Do.	2/76	205	2/179	9/94	209	165	n.a.	3,776
Average h.p. tractor	H.p.	2/24	n.a.	2/19	22	18	26	n.a.	31
Arable land per 15 h.p. units	Hectares	2/60	26	2/27	60	74	64	n.a.	61
Fertilizer consumption (active substance) per ha. of arable land.	Kilograms	186	178	303	112	118	46	67	36

1/ Current prices except Czechoslovakia (1967 prices) and East Germany (1950 prices). 2/ 1967 data. 3/ Definitions of agricultural trade based on categories reported in country statistical yearbooks--primarily agricultural raw material plus processed food; forestry products excluded. 4/ Estimate. 5/ U.S. Bureau of the Census data. Bulgaria, Hungary--1967 data; Poland, USSR--1968 data: Romania--1966 data; Yugoslavia--1961 census. 6/ Arable land includes cultivated land, orchards and gardens, and vineyards. 7/ U.S. Bureau of the Census data. Economically active population, including unemployed. 8/ End of year. 9/ Beginning 1968 tractors in machine tractor stations excluded.

Table 17.--Eastern Europe and the Soviet Union: The Socialist sector's share of agricultural resources and output, by country, 1968 1/

Resource or product	Bulgaria 2/	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugoslavia	USSR
				Percent				
Land:								
Agricultural	84	85	85	84	16	84	30	99
Arable	86	89	87	81	15	86	15	97
Employment 3/	94	88	98	80	14	90	n.a.	100
Tractors, physical units 4/	100	100	100	96	86	100	67	100
Livestock 5/:								
Cattle	70	85	73	62	16	52	6	72
of which cows	60	80	70	52	11	44	4	59
Hogs	56	76	66	48	11	54	16	74
Sheep	52	67	78	85	18	50	3	79
Poultry	29	53	27	14	n.a.	n.a.	13	n.a.
Agricultural output:								
Grains	85	90	6/96	76	7/14	89	26	98
Potatoes	43	66	6/91	49	8	53	3	38
Sugarbeets	98	99	6/99	100	13	100	62	100
Meat	50	8/82	n.a.	50	n.a.	46	27	62
Milk	71	8/45	n.a.	53	12	44	14	62
Eggs	40	8/78	n.a.	20	6	19	n.a.	40
Total 9/	78	80	n.a.	2/58	13	n.a.	2/21	10/70

1/ Land, livestock, and agricultural output of privae plots of collective and state farm workers and industrial workers are not included in the "Socialist" sector. 2/ 1967 data. 3/ U.S. Bureau of the Census data. Civilian employment--1967. 4/ End of year. Poland--includes tractors in agricultural circles. 5/ January 1. 6/ Includes production on private plots. 7/ Includes only wheat, rye, barley, and oats. 8/ 1966 data. 9/ Value of gross output in current prices, except 1959 prices in Hungary, 1950-52 prices in Poland, and 1965 prices in the Soviet Union. 10/ Estimated.

Information on agricultural conditions in Mainland China, North Korea, North Vietnam, and Cuba is limited. This report is based upon weather data and statements about crop conditions contained in Attache reports from Hong Kong, newspapers, journals, and radio reports from the respective countries. It also draws on reports by commercial, academic, and other specialists familiar with the countries. This information is evaluated by ERS specialists in light of historical and other information bearing on the agriculture of these countries.

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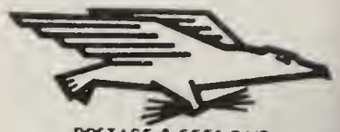

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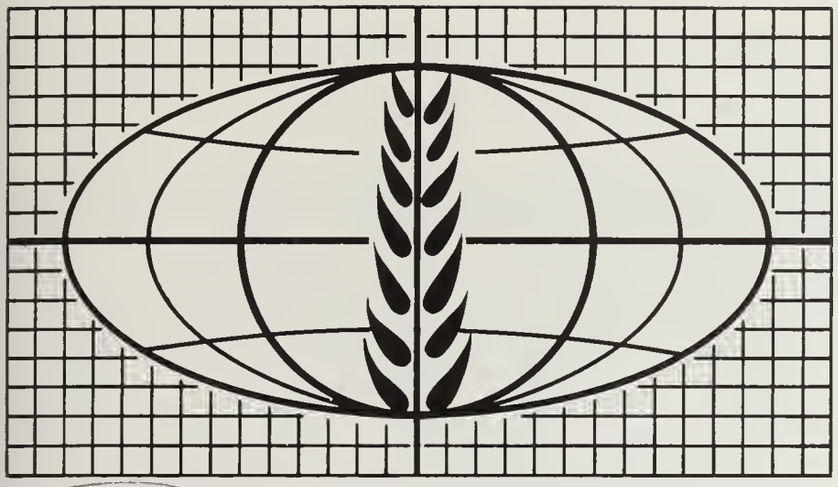


ERS-Foreign 293

THE AGRICULTURAL SITUATION IN AFRICA AND WEST ASIA

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 5944-69(3) ECONOMIC RESEARCH SERVICE

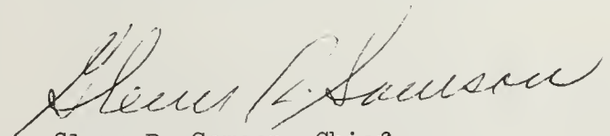
ABSTRACT: Total agricultural output in Africa rose about 2 percent from 1968 to 1969. Twenty-one of 31 African countries covered in the report showed increases; eight had losses. In West Asia, total agricultural production was down slightly in 1969. Five of eight countries covered in the report registered declines. Compared with 1968 levels, both areas experienced declines in per capita food production. The report gives the early-season outlook for 1970 crops by selected countries and commodities, reviews country trade in agricultural products, and covers each country's trade policy in 1969.
KEY WORDS: Agricultural production in Africa, West Asia.

FOREWORD

This is one of five regional supplements to The World Agricultural Situation: Review of 1969 and Outlook for 1970, FAER 57, issued February 1970. Other regional reports are being published for Western Europe, the Communist Areas, the Western Hemisphere, and the Far East and Oceania.

Highlights of the agricultural year in Africa and West Asia are discussed in some detail in the country writeups. Some countries in that sphere are excluded owing to insufficient data. Tabular data for countries omitted from the text discussion are included in the appendix. U.S. trade data are available for most political entities of the area and are used in appropriate sections of this supplement.

For the Branch, Robert E. Marx directed and coordinated this report. Others participating in its preparation include Mary T. Chambliss, William F. Hall, Marie A. Kelleher, Michael E. Kurtzig, Lillian M. Loeb, Margaret B. Missiaen, Pauline G. Price, Snider W. Skinner, H. Charles Treakle, Joyce E. Wallace, and Cline J. Warren. Agricultural situation reports from the U.S. Agricultural Attaches abroad were helpful.



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Washington, D. C., 20250

April 1970

THE AGRICULTURAL SITUATION IN AFRICA AND WEST ASIA

Review of 1969 and Outlook for 1970

SUMMARY

Africa's agricultural outturn for 1969 was almost 2 percent greater than in 1968. The index of total agricultural production rose to 127 percent of the 1957-59 base--a new high.[1] Food production per capita faltered, however, and the index dropped to 95, the lowest level of the 1960's, and one point below 1968.

The most significant gain in Africa's production was registered in the UAR, one of the continent's three agricultural giants. Egyptian farmers produced more than ever before. Substantial gains were recorded for major grain crops, with rice production reaching an alltime high of 2.4 million tons.[2] But the major factor in the increased performance of Egyptian agriculture was a 17-percent increase in cotton production to 511,000 tons for 1969. This is not a record, but close to it.

South Africa and Nigeria, the other two of the agricultural giants, registered no change and one percent greater production, respectively.

Better crops were harvested in those countries of West Africa where a 1968 drought necessitated emergency food aid, partly from the United States. Senegal, Mali, Niger, and Upper Volta were the main recipients.

Having experienced a superlative year in 1968, Moroccans were not surprised when their agricultural production dropped off sharply--approaching 20 percent--in 1969. Wheat production, for instance, fell about one-third. Even so, it was an exceedingly good crop surpassed in Morocco's history only by the 1968 crop.

Tunisia suffered a considerable decline in farm output--the fourth consecutive year of rather poor crops. Tunisia has not had a good wheat crop since 1965.

A virtual across-the-board rise in production resulted in Africa's 1969 crop of cotton being the largest ever produced. Cotton is one of the top three export crops of the continent.

In West Asia, agricultural output was down slightly in 1969. The regional index of production was 138, while the index of per capita food production was down to 100.[3]

Cyprus and Jordan showed very large increases in output. Such small countries are more likely to be affected uniformly by weather than big areas are.

Lebanon's apple crop was severely reduced; only about 40 percent as many apples were harvested in 1969 as in 1968. Not since 1960 were there so few Lebanese apples harvested.

Wheat production in West Asia totaled 14.6 million tons, down by a few hundred thousand tons from the 1968 level. Each of the two biggest wheat growers, Turkey and Iran, experienced a slight drop in the 1969 crop.

Cotton is the largest export crop of West Asia. Regional cotton production in 1969 was about 725,000 tons--off about 7 percent from the very high level of production in 1968. Turkey had a drop of possibly 50,000 tons; 1969 was the first year since 1960 that Turkey did not show an increase in cotton production.

1/ Based on production of 31 countries for which indices have been prepared.

2/ Metric tons and U.S. dollars are used in this report; exceptions are stated specifically.

3/ Based on production of eight coutries for which indices have been prepared.

ALGERIA

Early in the season, the 1969 harvest gave promise of being a bumper one. However, adverse weather damaged the cereal crops, causing the final outturn to be down considerably from the previous year. Gross domestic product (GDP) was expected to increase by about 7 percent (at current prices) during 1969 due largely to a substantial rise in industrial production and construction. This was well below the 12 percent growth in GDP of 1968, but slightly above the 1963-67 average.

Agricultural Production

The index of total agricultural production fell to 84 percent of the 1957-59 base, down from 96 percent in 1968. Total grain production has been estimated at between 1.5 million and 1.6 million tons, down considerably from the more than 2 million tons harvested in 1968. The wheat crop (40 percent soft wheat and 60 percent durum) probably slipped to about 1.25 million tons from 1.53 million tons the previous year. Domestic grain consumption requirements likely were considerably above production levels. The value of cereal imports has gone from $43 million in 1966 to $59 million in 1967 and back to $44 million in 1968. These fluctuations are largely due to the influence of the weather on the size of the harvest.

The production and export of wine have posed major problems for the Algerian economy in recent years. Since there is very little domestic consumption of wine, the industry has been dependent on exports--particularly exports to the protected French market. Access to this market, however, has been severely limited in recent years. (See section on trade.)

Algeria is now embarking on a vineyard reconstruction program, which will cost $400 million over the next 10 years, to reduce the area under wine grapes from 350,000 hectares (865,000 acres) down to 200,000 hectares (495,000 acres). This will reduce annual labor needs by more than 10 million man-days. To compensate for this, the government intends to put an extra 33,500 hectares (83,000 acres) under cultivation of table grapes and 10,000 hectares (25,000 acres) under grapes for raisins. More emphasis will also be put on the production of high-quality wine because of shrinking markets for vin ordinaire.

Production of most fruits and vegetable increased during 1969. Total citrus production was estimated at 440,000 tons, up slightly from the previous year. Heavy rain and floods in eastern and central Algeria destroyed much of the date crop. Algeria will export few if any dates during the current season. Date exports usually total mor than 20,000 tons annually.

The rains, which were heaviest during October, also damaged thousands of cropland hectares, some vineyards, and stored crops. Planting for the 1969/70 agricultural season had not begun when the floods came, so damag to annual crops was minimal. Soil moisture conditions should be greatly improved, but some planting may have been delayed or prevented because of wet fields.

Agricultural Policy

Algeria's new 4-year development plan was announced on January 20, 1970. Preliminary information suggests that approximatel $5 billion will be spent during 1970-73 to achieve an annual growth rate of 6 percent in the overall economy. Fifty percent of th expenditures will go to the industrial secto Agriculture will be the third area of emphasis; education is second.

The Algerian government controls the prices which marketing organizations pay to producers for many commodities. In 1969, minimum prices were in effect for wine, olives, cereals, garden vegetables, and citrus. In 1968 the price for durum wheat was raised from $103 to $109 per ton and for soft wheat from $89 to $97 per ton.

Foreign Trade

Algeria's total imports during 1968 were valued at $707 million, down $7 million from 1967. Agricultural products made up 23 percent of the total compared with 29 percent the year before. A $15-million

ecrease in cereal imports (from $59 million $44 million) reflected the greatly improved 1967 and 1968 cereal harvests. Wheat ccounted for almost 90 percent of cereal mports in 1966 and 1967. Other major agricultural imports during 1968 were dairy products worth $22 million, cotton worth $17 illion, and sugar worth $15 million.

Algeria's exports continued to expand apidly during 1968 due largely to increased etroleum exports. The value of total exorts rose to $772 million from $714 million 1967.

Agricultural exports increased from 120 million to $141 million during the same eriod. Agriculture's share of the total emained nearly constant at 18 percent. Exorts of wine recovered from the low level 1967. These shipments were valued at $77 illion in 1968 compared with $56 million in 967. Improvement in the current wine exort situation has been due to several hings: a lifting of the French ban on wine mports; a change in French blending regulaions for foreign and domestic wines; the SSR's agreement to import 5 million hectoiters (1 hectoliter = 26.4 U.S. gallons) of lgerian wine annually for 7 years beginning 1968; and reduced wine production in rance in 1969 which increased the French emand for Algerian wines. Algerian exports f wine for the first 6 months of 1969 were almost $20 million over January-June 968. Exports of fresh fruit and vegetables the European market are important sources f earnings for the agricultural sector. ruit valued at $27 million was Algeria's econd most important agricultural export in 968. (Margaret B. Missiaen).

BOTSWANA

gricultural Production

Arid, landlocked Botswana experienced rought the past several years and had to mport more food than usual. The most imortant crops grown are sorghum, corn, milet, beans, cowpeas, cotton, and peanuts. xcept for cotton and peanuts, which are exorted, these crops are used for consumption. owever, sometimes due to storage problems nd the disorganization of markets, consumption crops are exported at harvest and reimorted at higher prices later in the season. Production varies greatly from year to year due to the weather. Lack of water is the limiting factor in agricultural production.

The major commercial activity in the country is livestock raising. The long dry period in the early sixties reduced cattle numbers to less than a million; now they have risen to about 1-1/2 million. Over 80 percent of the cattle are owned by traditional farmers; less than 20 percent, by commercial farmers. It has been estimated that Botswana has a carrying capacity for 2-1/2 million cattle on 92 million acres of present or potential grazing land. However, because of lack of waterholes, infestation of tsetse fly, and other problems, much of this potential cannot be realized for some time. Without additional water, cattle numbers cannot increase much; at present there is overgrazing near the waterholes.

The Botswana Meat Commission has located good markets for the meat it processes. There is a strong demand in nearby countries, especially the Republic of South Africa and Zambia. It also sells meat in the European market, mainly the United Kingdom, and is moving into new markets in Africa, for example, Ghana.

Agricultural Policy

Botswana is working under a 5-year development plan (1969-73) aimed at developing agriculture and mineral potential, and the needed infrastructure. There have been several recent mineral discoveries. Diamonds, copper, and nickel are the most promising. The plan provides for the opening and developing of two large mines in the north. It also provides for the development of roads which are greatly needed throughout the country. In the agricultural sector emphasis is placed on the improvement of livestock, mainly cattle, and on range management. The improvements desired in crop production are first to improve subsistence agriculture and to develop a limited amount of commercial production to supply urban dwellers as well as to export.

Foreign Trade

Traditionally Botswana experiences a trade deficit. The most recent estimates available are for 1968 when the imbalance was $22 million. Exports consist of meat

and meat byproducts, about 90 percent of the total, plus small sales of beans, peas, sorghum, talc, and manganese ore. Meat exports are planned to increase. Exports of minerals should develop rapidly in the 1970's. The main imports are food products and petroleum products and manufactured consumer goods. The Republic of South Africa is by far the major source of imports. Botswana is a member of a customs union with the Republic, Lesotho, and Swaziland. The terms of this union have recently been revised and Botswana will receive greater revenues under the new terms. Free movement of almost all goods will continue among the members. (Mary T. Chambliss).

CAMEROON

Perhaps the most significant economic news in Cameroon in 1969 was the opening of a new 181-mile section of the Trans-Cameroon railroad. This section extends from Yaounde to Belabo. A further extension of 206 miles, from Belabo northward to Ngaoundere, is planned. The United States has agreed to lend $10 million toward the construction of this extension. France and the European Community are also helping to finance the new railway.

Also of significance is the completion of the "unification highway" between Tiko, West Cameroon, and Douala, East Cameroon. Though only 19 miles long, this road was difficult and expensive to build because it crossed dense mangrove forests and marshes. West Cameroon was formerly British Southern Cameroons and East Cameroon was formerly French Cameroun.

A sugarcane plantation and refinery have been established at M'Bandjok, approximately 60 miles northeast of Yaounde, along the tracks of the Trans-Cameroon railroad. The total investment, by a semi-governmental enterprise, is $8.6 million. The sugar refinery has a potential capacity of 15,000 tons of refined sugar per year.

In West Cameroon, a poultry feed mill became operational at Muyuka in November 1969. The mill, as well as a poultry extension center at Muyuka, is supported by USAID (U.S. Agency for International Development).

Two new luxury hotels have been opene in Cameroon at Garoua and Yaounde.

Agricultural Production

Coffee and cocoa are the chief export crops of Cameroon. Coffee production for 1969/70 is estimated at 1.1 million bags (66,000 tons), same as the previous 2 years but more than twice the 1957-59 average. Cameroon produces both robusta and arabica coffee.

As a producer of cocoa beans, Cameroo ranks fourth in Africa and fifth in the world. The 1969/70 crop is estimated at 105,000 tons, down 5,000 tons from the preceding harvest but 42,000 tons above the 1957-59 average.

Agricultural Policy

Growers of several of Cameroon's important export crops receive guaranteed prices for the season for their harvests.

For the 1969/70 season, producers of cocoa beans received 13.9 cents per pound for Grades 1 and 2 and 11.4 cents a pound for off-standard beans.

At the close of calendar year 1969, coffee growers were given a slightly highe guaranteed price. The robusta price was raised from 18.8 cents per pound to 19.1 cents. The arabica coffee price was raise 1.6 cents a pound to 21.2 cents.

For the 1969/70 marketing season, Cameroonian cotton growers received 4.9 cents per pound for white and yellow unginned cotton and 4.6 cents a pound for unsorted, unginned cotton.

Foreign Trade

In 1968, Cameroon's exports and imports were closely matched, with exports being valued at $189 million and imports $188 million. Major agricultural exports included cocoa beans and products valued at $60 million, coffee $51 million, and cotton $8.2 million.

According to U.S. trade statistics, Cameroon in 1968 was the 48th largest supplier of agricultural imports to the Unite

tates. These agricultural commodities ere valued at $23 million. Coffee ($20 illion), unmanufactured tobacco ($1.6 million), and cocoa beans ($1.0 million) were he largest items. (Snider W. Skinner)

CONGO (KINSHASA)

In 1969, for the fourth consecutive ear, Congolese agriculture continued the low pace of recovery from post-independence urmoil. Preliminary data suggest that the xpansion rate in total agricultural production more than equaled the rate of increase n population. Along with major food crops, mall gains were reported for the country's hree principal export crops--palm products, offee, and rubber. Favorable climatic conitions generally prevailed, but the greatr share of this progress must be ascribed o the return of political stability and acification of the rural areas.

Growth was also reported for other ectors of the economy. Copper production, he country's key export item, is estimated o have been up 9 percent over 1968's 26,000 tons. Mostly as a result of higher orld prices for copper, the Congo enjoyed balance-of-payments surplus, relatively igh government revenues, and rapidly growng foreign reserves during the first three uarters of 1969. These favorable trends ery likely prevailed in the fourth quarter.

Monetary reforms undertaken in 1967 ave helped to establish a favorable climate for economic development and growth. Besides curbing inflation, they provide incentives to producers and promote exports. However, the latent threat of renewed inflationary pressures still exists and Congolese officials feel that continued prudent fiscal and monetary policies are necessary o retain the gains of the past 3 years. Moreover, economic growth continues to be hampered by serious infrastructure deficiencies, particularly in transportation.

The Congo received considerable foreign aid to encourage development during 1969. The European Economic Community approved a grant of 5.5 million Zaires ($11 million) for agricultural development. The United States provided large amounts of aid in various forms. Aid was also received from Belgium, France, and various international organizations. Major agricultural work projects being undertaken include work on rice, cotton, and vegetable production; development of market gardens in urban areas; improved and commercialized production of tobacco, corn, cassava, oil palm products, tea, and pyrethrum; development of cattle herds and veterinary services. There are also projects to improve transportation and other marketing facilities. The major thrust of these efforts is to improve the country's degree of self-sufficiency in basic foods and fibers.

Agricultural Production

The most important increases in 1969 production occurred for rice, corn, cotton, and palm oil. Smaller gains were indicated for most other crops. Even so, farm production remained 10 percent below the 1957-59 level and even further below the country's total agricultural potential.

Cotton growing practically ceased in the mid-1960's. More recently, government efforts to expand cotton output have met with considerable success. Production has increased more than threefold since 1965, reaching an estimated 20,000 tons in 1968 and possibly 40,000 tons in 1969. With continued expansion, the country might well become self-sufficient in cotton production in the immediate future.

With the larger cotton crop has come increased cottonseed output. Some gains were also registered for peanuts and sesame. Palm oil remains the major vegetable oil of the Congo. Its production in 1969 likely neared 220,000 tons, up some 10,000 tons from a year earlier and almost double the 1965 level. Improved prices to producers along with the government's reduction of export duties from 15 to 5 percent on palm oil at the end of 1968 helped to promote greater production and to increase exports. These duties have been further reduced to 3 percent of the oil's export price. Indications are that the vegetable oil industry will make even greater progress during 1970.

Production of most subsistence crops approximates pre-independence levels. This is true for millet and sorghum, pulses, cassava, sweetpotatoes, sugarcane, and bananas and plantains. The major exception

is rice. While increasing, rice production is still less than half the 1957-59 level. Growing urban demand for rice and wheat flour in recent years has been met through greater imports.

Foreign Trade

Along with governmental measures to improve tax collections and expand agricultural production, modifications were made in the country's foreign trade policies. Export duties were reduced or in some cases eliminated in October 1969 to promote exports of the following primary commodities:

	Previous duty	Current duty
	- - - Percent - - -	
Coffee beans.....	16	3
Tea.....	12	exempt
In-shell peanuts.....	20	exempt
Unshelled peanuts....	25	exempt
Palm oil and palm kernel oil.....	5	3
Natural rubber.....	10	5

Meanwhile, efforts were made to discourage greater imports of direct consumer goods. While import duties on some items used by the local industry were reduced, those on other items used directly by the consumer were increased.

During 1969 the Congo signed a number of bilateral trade agreements with neighboring countries. Most Congolese trade is still, however, oriented toward Western Europe--primarily Belgium--and the United States. Exports in 1969 likely were substantially above the $569 million reported for 1968. By value, agricultural products currently account for one-fifth of all exports. Indications are that the leading agricultural exports--coffee, tea, rubber, and palm products--registered some gains during 1969.

Agricultural imports center around meat and meat products, raw cotton, cereals and cereals products. The value of these imports may well have exceeded returns from farm exports. In recent years, most of the cereals, cotton, and tobacco have been received from the United States under special concessional programs. U.S. agricultural shipments to the Congo in 1968 were valued at $14.6 million. Grains and preparations--predominantly wheat and rice--were valued at $8.5 million. Cotton was next of importance with a value of $2 million, followed by $1.6 million for tobacco. U.S. agricultural sales to the Congo will meet with increasing competition from third countries and from local production. U.S. agricultural imports from the Congo are confined almost entirely to coffee, palm products, and crude rubber. The balance of trade between the two countries is usually in favor of the United States. (Cline J. Warren)

ETHIOPIA

Agriculture usually accounts for 70 percent of the country's GNP. The 1969 GNP was estimated at $1.7 billion for a per capita average of $69. Ninety percent of the 24.7 million (mid-1969) Ethiopians maintain their existence by subsistence farming and semi-nomadic herding. While relying heavily on coffee exports, the country is exploring other alternatives to diversify and raise revenues. Under the third 5-year plan (fiscal years 1969-73), Ethiopia plans to spend $137.2 million on agricultural projects. Besides providing more tools, better seed, and other inputs, large tracts of new land will be brought into production using modern farm equipment.

Agricultural Production

Estimated agricultural output of Ethiopian farms increased almost 4 percent in 1969 to an index of 131 (1957-59 = 100).

In 1969, coffee output was not as high as in the previous year even though it was a very good crop. Ethiopia's quota under the International Coffee Agreement was increased by 10,000 tons and prices rose in the latter part of the year. Most of the bonus quota was not supplied in 1969.

Sugar production was estimated at 66,000 tons, down 1,000 tons from 1968, but 1970 production is estimated at 70,000 tons. A new sugar estate and factory came into operation in September. The factory has a rated annual capacity of 29,000 tons that can be raised to 65,000 tons quickly should it be needed. Planners hope the

gar industry will produce some for export 1970.

Grain production for 1969 was estimated 5.5 million tons, up 200,000 tons from e previous year. Drought struck the Eri-ea area in 1969 and government officials ve initiated action to import 10,000 tons sorghum (commercial basis) to stabilize ices.

ricultural Policy

Ethiopia is preparing a new investment oclamation, raising the prospect of more beral benefits to foreign investors in hiopia. Agro-industry investments are re-mmended as likely to be profitable.

The National Coffee Board, stunned by e economic loss incurred in 1969 by not lling the national coffee quota, has pro-sed that coffee beans be stockpiled at ergency purchase centers that have trans-rtation routes exempt from seasonal dis-ption by floods. The outlook for financ-g this proposal appears bleak. The rrent highway program will not signifi-ntly alter this situation quickly. Higher rices in the latter part of 1969 have spur-d some coffee growers into installing ashing equipment. Washed coffee brings a remium price. Currently 95 percent of thiopia's coffee exports are unwashed beans.

Cattle losses to rinderpest are common n Ethiopia and elsewhere in Africa. The lanning Commission and the Finance Ministry re pledged to support an attack on this isease in south Ethiopia. Nine teams work-ng in the Sidamo and Bale Provinces are cheduled to inoculate cattle with 4.25 mil-ion doses of vaccine. In 1972 nine more eams will be added with the task of dis-ensing 9 million doses. The United States, nited Kingdom, and the United Nations are upporting this attack.

oreign Trade

Agricultural products account for about 5 percent of Ethiopia's annual exports by alue. Coffee leads the list of agricul-ural products, accounts for over half the otal, followed by oilseeds, with fruits and egetables and hides and skins making up ost of the rest. Exports in 1969 were es-imated at about $110 million and imports t $180 million.

Italy, West Germany, and the Netherlands supply most of Ethiopia's imports. The United States usually is the source for around 10 percent of the country's imports. (William F. Hall)

GHANA

Ghana has shown some signs of economic nationalism. Certain commodities can now be sold only by Ghanaians.

As a phase of this economic nationalism, illegal aliens were ordered to leave Ghana in November 1969. Great confusion ensued among the refugees and some hardship resulted. In Ghana, the docks at Takoradi and the fishing port at Tema, traditionally manned by laborers from Niger, were left undermanned. Certain products, usually sold by itinerant traders from Nigeria, were temporarily in short supply. These commodities included spring onions, potatoes, yams, beef, charcoal, and kerosene.

Aliens make up a significant part of the labor force in the country's cocoa areas. Apparently, the deportation order was not enforced with as much vigor there as elsewhere. The harvesting, fermenting, drying, and marketing of cocoa beans moved ahead at about the usual pace.

During 1969 the Volta Aluminium Co. announced plans to raise the smelter capacity at Tema from 112,000 tons to 147,000 tons, at a cost of $24 million. This increased capacity will coincide with the installation of two new generators at the Volta Dam at Akosombo. These generators are being financed by loans from Canada and the World Bank.

In 1969, various new enterprises were opened in Ghana, including an oil palm mill at Asraku, and cement, garment, and razor factories. Plans include paper and lime (mineral) factories and a new brewery. A Japanese automobile manufacturer has opened an assembly plant in Ghana.

The World Bank is providing financial assistance for a $35 million highway, linking Ghana's major cities--Accra, Kumasi, and Takoradi.

Agricultural Production

Ghana's agricultural output very likely rose about 6 percent in 1969 to an index of 143 (1957-59 = 100). Production of the major crop, cocoa beans, is estimated at 400,000 tons for the 1969/70 harvest season, up 18 percent over the 1968/69 crop. The world price remains favorable to the producing countries but not all of it trickles down to the Ghanaian cocoa farmer. In June 1969 the price paid to producers by the Cocoa Marketing Board was raised to 8 new cedis per headload of 60 pounds (13.1 cents per pound). This compares with the price of 7 cedis per headload paid during the 1968/69 main-crop season. The new price is still considerably below the prices paid cocoa growers in Nigeria and Cameroon.

Foreign Trade

In 1968, gold was a distant second to cocoa beans as an earner of foreign exchange. Total Ghanaian exports, agricultural plus nonagricultural, were worth $332 million. Total imports in 1968 were valued at $306 million.

According to trade figures furnished by the U.S. Census Bureau, Ghana in 1968 was America's 47th best customer for agricultural exports. Of $19 million in farm products sent to Ghana, the largest items were rice valued at $7.3 million, animal fats and oils $2.9 million, unmanufactured tobacco $2.8 million, cotton, $2.7 million, and wheat $1.5 million.

In return, Ghana was the 29th largest supplier of farm products to the United States. Valued at $46 million, cocoa beans accounted for 94 percent of U.S. farm imports from Ghana. (Snider W. Skinner)

GUINEA

Agricultural output for Guinea in 1969 probably improved over 1968 as normal weather conditions prevailed during the growing and harvesting seasons. Since agriculture accounts for two-thirds of gross domestic product and provides a livelihood for some 70 percent of the population, the growth of the Guinean economy is directly influenced by the level of agricultural output. GDP in 1967/68 was estimated at $660 million (when converted at the official rate of 247 Guinea francs per dollar), an increase of 7 percent over the previous year. Guinea's long-term growth rate is much below this level. Agriculture's importance in the economy will decline, as the mining and exporting of bauxite become more important.

Agricultural Production

The index of total agricultural production rose 4 points in 1969 to 114 percent of the 1957-59 base, while per capita production remained at an index of 83. Accurate data on Guinea agricultural production are not readily available. Generally, rice forms the basic food in the diet; and domestic production--estimates for 1969 ranged between 350,000 and 400,000 tons--is insufficient. That means large imports are required each year. The United States is an important supplier of rice to Guinea under P.L. 480. The United Nations, the USSR, and Yugoslavia are assisting Guinea in its plan to add 28,000-30,000 hectares (approximately 70,000 to 75,000 acres) to domestic production. Cassava, sweetpotatoes corn, and fonio (*Digitaria exilis*) are the other major components of the average diet. Production of all these crops is trending upward.

Bananas, coffee, palm kernels, pineapples, and peanuts are the important export crops. Banana production decreased after independence when the foreign owners of plantations left the country and many plantings were attacked by disease. The government is attempting to regain the previous status of this crop by increasing the cropped area, bringing plant diseases under control, and finding new export outlets primarily in Eastern Europe.

Coffee production is not increasing due largely to the effects of disease. Exports have been limited because of ICA quotas and because of clandestine shipments across Guinea's borders. All this points to production not expanding rapidly in the near future.

On the other hand, production of pineapples has increased since independence. Eastern European countries have been paying above world market prices for Guinea pineapples, and this has aided in an expansion of the area devoted to them. Palm kernel

nd peanut production are trending upward; ore of these are being processed in Guinea.

gricultural Policy

Guinea subsidizes its agricultural exorts through Guinexport, the state marketng organization. In 1967/68, the export ubsidy on bananas was 31 percent, on coffee 56 percent, on peanuts 92 percent, on alm kernels 143 percent and on pineapples 47 percent. Producer prices and therefore xport subsidies were reduced somewhat in 968/69.

Guinea has a comprehensive system of rice controls. Changes in official prices ave been very slow. As a result of the imitation on imports and price ceilings, n unofficial marketing system developed. his has operated, in large part, by selling Guinea products in neighboring countries nd buying consumer goods for resale in uinea at very high prices. To solve this roblem, Guinea established regional marketng agencies to provide a closer link beween producers and the state marketing ystem.

oreign Trade

Guinea's total imports for fiscal 968/69 are estimated at $65 million. That ontrasts with the $50 million figure for 967/68. Preliminary figures indicated hat agricultural imports surpassed $13 milion in value, almost double the previous ear's total. All major categories of food mports increased substantially between 967/68 and 1968/69--rice imports jumped rom $3.1 million to $6.1 million, wheat lour from $1.4 million to $3.1 million and ugar from $1.2 million to $2.3 million.

The value of Guinea's exports increased nly moderately in fiscal 1968/69, accordng to preliminary estimates. Exports were orth $57 million, compared with $53 million n 1967/68. Agricultural exports also increased--from $18 million to $21 million--during this same period. The most important agricultural exports were coffee worth $5.6 million, pineapples worth $4.0 million, bananas worth $3.9 million, and palm kernels worth $3.8 million.

In 1969, Guinea signed another P.L. 480 agreement with the United States, this one for $7.5 million worth of wheat flour, rice, soybean oil, tallow, nonfat dry milk, and cotton. Guinea agreed to continue efforts to stabilize its economy, prevent inflation, improve its agricultural production and especially to promote rice culture. (Margaret B. Missiaen)

IVORY COAST

The Ivory Coast GNP for 1967 was estimated at $1.07 billion or $276 per capita. Industrial output in 1969 was at more than five times the 1960 level while agricultural output was nearly double. Annual economic growth has been above 10 percent in recent years. It is expected to level off at about 5 or 6 percent over the longrun.

Rapidly rising consumer prices are of considerable concern to the government. In 1968, prices were at 141.8 percent of the 1960 level, compared with 137.2 percent in 1967. Part of the problem results from a 14.2 percent currency devaluation the Ivory Coast (and the rest of the franc zone) underwent in August 1969. The government has tried to curb inflation by establishing selected price controls.

Foreign investment in the Ivory Coast now exceeds $400 million. Much of the investment is in rural areas. This helps to lessen the problems of urban unemployment.

Les Grands Moulins, Ivory Coast's flour mill, increased its output of flour from about 55,000 tons in 1968 to 60,000 tons in 1969. Only French soft wheat is milled. The company plans to install machinery and ovens for making biscuits and macaroni.

SACO (Societe d'Africaine de Cacao) received about 30,000 tons of domestic cocoa beans for processing in 1969.

During 1968 palm oil processing plants were completed at Eloka and Toumanguie. Another plant was scheduled for completion in 1969. Three more will be ready by the end of 1970. A total of 8 new plants are scheduled for completion by the end of 1973. These mills will be needed to process the harvest from massive plantings of hybrid oil palms, now beginning to bear.

Near Abidjan a large modern plant soon will manufacture Dutch wax print cotton cloth. Another long-established textile complex is located at Bouake.

A new pineapple cannery, with an annual capacity of 30,000 tons, will be built in the Bonoua area, near Abidjan. The Ivory Coast already has pineapple canning plants at Ono Lagoon and at Tiassale on the west bank of the Bandama River.

A new fertilizer plant has been built at Vridi. It is due to be in operation at the end of 1970.

Agricultural Production

In 1969, agricultural production rose 8 percent to an index of 191 (1957-59 = 100). Cotton production had exceeded goals in several years, but failed to do so in 1969. The goal was 50,000 tons of seed cotton (17,000 tons of cotton lint); actual production was 38,000 tons of seed cotton, in contrast to 45,000 tons the year before.

Although oil palm and coconut palm areas have been greatly expanded in recent years, most of these new trees had not started bearing in 1969.

The Ivory Coast economy is still largely dependent on the coffee and cocoa crops. The year 1969 was not a good one for coffee farmers, since excessively heavy rains reduced the 1968/69 crop by about a fourth from 1967/68, to 204,000 tons. Most of the income from the 1968/69 crop was received by the coffee growers in calendar year 1969. The effect of the poor crop was less serious for the government, which was able to maintain the level of export sales. The 1969/70 coffee crop is estimated at 240,000 tons.

The 1969/70 cocoa crop is estimated at 160,000 tons, up 11 percent over the 1968/69 crop.

Foreign Trade

The year 1968 was the 21st consecutive year that Ivory Coast maintained a favorable balance of trade. Exports in 1968 were valued at $377 million and imports at $279 million.

Agricultural exports account for over 80 percent of Ivory Coast's total exports. In 1968, coffee and cocoa exports made up 53 percent of total exports. France was Ivory Coast's best customer.

In 1968, agricultural imports amount to $42 million or 15 percent of total imports. France supplied $139 million (abo half) of Ivory Coast's imports, agricultu and nonagricultural.

In 1968 the United States imported $ million worth of Ivorien farm products. C this amount, $59 million was in coffee an $14 million in cocoa beans. The Ivory Co is the 22nd largest supplier of farm products to the United States.

U.S. agricultural exports to Ivory Coast in 1968 were quite small, totaling $371,000. Major items were $163,000 in rice and $44,000 in tobacco. Total U.S. exports to the Ivory Coast were valued at $12 million. (Snider W. Skinner)

KENYA

Kenya continued its steady economic growth during 1969, its sixth year of independence. Agriculture provides a livelihood for over 75 percent of Kenya's 10.8 million people. Agriculture, which also contributes about 35 percent of the gross national product, had two better than average years in a row--1968 and 1969, during which time the first 5-year development plan was completed and a second one was launched. This new plan gives priority t rural farming areas by increasing their financial share of the country's economic growth.

Due to Kenya's wide range of altitud there is considerable variation in clima from temperate to tropical. This variat allows Kenya to grow a variety of farm products. Since Kenya has a limited are under irrigation, much of the agricultura bounty fluctuates with the amount, the t ing, and the distribution of rainfall.

Weather in 1969 generally favored crops. But coffee, Kenya's leading expo crop, did not produce at the expected le It escaped serious damage by the trouble some coffee berry disease, only to have harvest reduced when cool weather persis during July and August, delaying harvest and drying.

Early in the 1969/70 season a normally good year was expected as the weather in the closing months of 1969 held no surprises. Some areas had received above average rainfall and in other areas the rains had been below average.

Agricultural Production

Generally agricultural production improved over 1968. Preliminary estimates for 1969 show an index for agricultural production at 165 (1957-59 = 100), 2 points above the prior year.

Kenya has built a grain store at Nakuru, adding about 18,000 tons of storage capacity to the country's granaries. The new unit is managed by the Kenya Farmer's Association for the Wheat Board.

Corn, Kenya's largest grain crop, with an estimated production of 1.4 million tons, was about 200,000 tons below the 1968 crop. Corn and sisal were the major crops to produce below the 1968 level.

The coffee crop in 1969 escaped serious damage by the coffee berry disease which now appears to be effectively controlled. Cool weather during July and August delayed harvesting. Kenya's coffee crop, estimated at 50,000 tons was a little bigger than the 1968 crop.

Tea production, which in 1968 made a 32 percent gain with a harvest of 30,000 tons, climbed to 36,000 in 1969. Kenya's tea production has risen progressively since independence, and further progress is likely. The tea is still coming from relatively young bushes.

Raw sugar production reached a record 125,000 tons in 1969, after a rise to 100,000 tons in 1968, from a previous high in 1967 of 64,000 tons.

Livestock products have been steadily increasing over the last decade, but their contribution of about one-third of the aggregate value of all agricultural production has changed very little.

Livestock gains no doubt reflect the efforts made to improve range and improve quality of native cattle by using Boran breeding stock. Also, milk production schemes have brought fluid milk to supply urban markets. Through the Kenya Cooperative Creamery small-scale Kenyan farmers have taken over the supply of fluid milk to replace that which used to be supplied by those European farmers who have dropped out of farming.

Agricultural Policy

The marketing of most agricultural commodities is under some 20 statutory boards and commissions, mostly under the jurisdiction of the Ministry of Agriculture. These authorities may be purely regulatory--such as determining quotas, setting standards, issuing licenses--or they may handle, process, and market products and function as development agencies. Some boards fix prices but policies between boards differ, and a few administer funds for price stabilization. Board activities are supported by funds collected through license fees, cesses, government loans, and grants.

Kenya's farmers are served by some 1,000 cooperative societies which supply inputs, regulate quotas, supply credit, and provide marketing services. In 1968, a National Training College was established with Scandinavian assistance to train personnel for cooperative management.

In 1960 the government began the One Million Acre Settlement Scheme for purchasing 1.2 million acres for the settlement of African farmers. The purchasing for the scheme was practically completed in 1969. This scheme is estimated to involve almost 34,000 families who will derive a living directly or indirectly from the program.

The government has also assisted its farmers in taking over large-scale farms that have changed hands since independence.

Published in December 1969, a new development plan set as a goal an economic growth rate of 6.7 percent a year. This is 0.4 percent higher than the target set and achieved under the first plan.

Kenya, Tanzania, and Uganda, form a regional common market that maintains a common external tariff and customs administration.

Foreign Trade

Kenya's exports amounted to about $236.6 million in 1968, 57 percent of which were agricultural. The major farm commodities traded were coffee, tea, corn, pyrethrum (flowers and extract), hides and skins, and vegetables. The United States ranked fifth as a destination of Kenyan products by taking about 11 percent of Kenya's farm exports.

Kenya's imports totaled $355.9 million in 1968 and of this total 9.2 percent were agricultural imports. Cereals and cereal preparations, fruits and vegetables, edible fats, and tobacco were the principal items. The United States ranks sixth as a supplier of total imports, but supplied only some 3.6 percent of the agricultural imports. (H. Charles Treakle)

LIBERIA

Liberia's two main earners of foreign exchange, iron ore and rubber, are priced in world markets, but not in its own. The iron ore price has stabilized at a rather low $7 to $8 per ton. Some of the already rich Liberian ore is being concentrated by a large pelletizing plant in Liberia. The pelletized ore sells at about $11 per ton. A second pelletizing plant, with a capacity of 2 million tons per year, is under construction at Bong, at a cost of $45 million.

Rubber prices are at a reasonably high level. Production of rubber in Liberia continues slowly upward.

U.S. investors are heavily involved in iron ore and rubber in Liberia.

A company from Oregon has obtained a concession on 1.5 million acres of timberland and will build a sawmill and subsequently veneer and plywood plants. The company's total investment will be about $10 million. This is the first time that Liberia's forests have been utilized on such a large commercial scale. This new industry will add some welcome diversity to Liberia's economy.

Due to overly enthusiastic acceptance of supplier credits, in years past, Liberia has an external debt of about $257 million, rather large for a country of its size, population, and wealth. In 1969, a repayment of $17.6 million was due but was rescheduled so that only $13.9 million had to be repaid.

Agricultural Production

In 1969, Liberia's output of agricultural commodities rose nearly 2 percent from the 1968 level and reached an index of 121 (1957-59 = 100).

For years, the government has sought self-sufficiency in rice, the country's staple food. Research has indicated that Liberia has the land, water, and cultivators to produce rice enough and to spare. In actual practice this has now worked out and each year Liberia imports about 40,000 tons of rice to supplement domestic production.

In late 1969, Liberia started a new multi-donor rice program in Loffa County under the direction of the United Nations Development Program, which also contributes financial aid. Others contributing technical and other support include USAID, the U.S. Peace Corps, and the Chinese Agricultural Mission. Reportedly, the Liberian government will pay $550,000 toward this project.

Oil palm production in Liberia is expected to increase in the near future. One 5,000-acre plantation planted to improved hybrid palm trees is beginning to produce. An oil extraction factory is being built; capacity will be 40 tons of fruit bunches per hour. A second plantation has 750 acres planted to oil palms and expects to plant additional areas over the next few years. A third plantation is in the planning stage. It is expected that farmers in the areas surrounding these plantations will market their oil palm fruit through the plantations.

Foreign Trade

In 1968, Liberia had exports valued at $169 million and imports valued at $108 million, giving an apparent favorable balance of trade of $61 million.

The total value of major agricultural exports was about $32 million, consisting

f rubber worth $26 million, coffee $2.9 illion, palm kernels $1.9 million, and co-oa $1.3 million. Major nonagricultural ex-orts included iron ore valued at $118 mil-ion, diamonds $9.1 million, and logs $1.5 illion.

Liberia is America's 45th largest sup-lier of agricultural products. In 1968, hese amounted to $25 million, of which $22 illion was crude rubber and $2.8 million as coffee.

The United States is Liberia's major arket for all exports and for agricultural xports. The United States is also the ma-or supplier of all imports and of agricul-ural imports. (Snider W. Skinner)

MALAWI

gricultural Production

Production gains in all crops except obacco, corn, and tung oil boosted 1969 ash receipts for most farmers. Total pay-ents to farmers by the Farmers Marketing oard rose to about $12 million; this ex-eeded the 1968 figure but smaller than the ecord $14.4-million payout in 1967. In 969 producer prices rose for corn, rice, ome pulses, and fire- and sun-cured tobac-os. Cotton and peanut prices remained un-hanged.

Production of tea, one of Malawi's ajor commercial crops, was a record 17,000 ons in 1969. Most of its tea is sold to he United Kingdom for blending, but an in-reasing part of the crop is being sold to he Republic of South Africa. Production ill probably continue its upward trend in 970. The official production target for 975 is 20,000 tons. Production of tobacco, he other major commercial crop, fell in 969 to possibly only 12,000 tons; however, he average price received was up and 1969's rop exceeded 1968's in value. The United ingdom is also the largest purchaser of alawi tobacco. Some tobacco finds a market n West African countries.

Peanuts are usually Malawi's third most mportant export crop; commercial production n 1969 was about 40,000 tons, far above 968 production. About 10 percent of the rop usually is purchased by the local oil-crushing industry; the rest is exported. Cotton production did not reach the original forecast for 1969; however, it did exceed 1968 production. Increasing cotton output is receiving high priority by the government development program. Cotton lint vies with corn for fourth place in Malawi's agricultural exports.

Corn is both a commercial and a subsistence crop. The exact amount of subsistence production is unknown; FAO estimates it is about 1.2 million tons. The commercial crop in 1969 was 64,000 tons, down from 1968 production. One reason for the corn decline is that farmers are shifting to cotton, peanuts, and rice as commercial crops. The government is especially encouraging rice production. About 50 rice experts from Taiwan are presently in Malawi. There is a good market for quality rice in the Republic of South Africa. Sugar, Malawi's newest commercial crop, has been very successful. Production now exceeds domestic needs and some is available for export.

The crop outlook in early 1970 is favorable. Improved weather, government expansion programs (including better prices), greater assistance to progressive farmers, and an estimated 60-percent increase in the use of fertilizer point to possible record crops. Significant gains are forecast for all types of tobacco. Although minimum corn prices are down slightly for 1970, commercial production is expected to increase. Tea production should continue upward. A slightly larger sugar crop is expected to provide more for export. Livestock production is showing signs of steady progress and both the size of the cattle herd and the off-take rate are expected to increase.

Agricultural Policy

The newly established Ministry of Agriculture has formulated a "new look" policy. It will concentrate on efforts to increase productivity of individual progressive farmers rather than of the mass of farmers as in the past. The government is also trying to improve marketing conditions and prices and to provide better technical and financial assistance. The country's three major development projects--at Salima, Lilongwa, and Chikwana--are now well established and should start paying dividends

in the form of increased production. Settlement and irrigation schemes continue to expand.

Foreign Trade

Trade data for all of 1969 are not available. However, for the first half of the year the trade deficit was $12.7 million. Imports were up by over 8 percent and exports showed a small decline from the like period in 1968. Data for the first half of the year also indicate that imports from the Republic of South Africa have increased greatly.

Total exports in 1968 were valued at $48.1 million, of which agricultural exports were $38.1 million. Tobacco was the largest export, $12.7 million. Tea was second at $11.6 million. Peanut exports were $5.5 million and corn exports were $3.6 million. The United Kingdom was by far the largest buyer of Malawian exports. Total imports in 1968 were $69.8 million; agricultural imports were only $9 million. The largest agricultural imports were dairy products, wheat flour, fruits and vegetables, and beer. The United Kingdom was the major supplier followed by Rhodesia and South Africa. (Mary T. Chambliss)

MALI

Mali, after experiencing a severe drought during the 1968/69 crop year, has recovered with a good harvest during the present season. The large food imports, necessitated by the very poor crop outturn last year, are not expected to be repeated. There is a very good chance that Mali may rebuild its depleted grain reserves.

Per capita gross domestic product in Mali was estimated at $46 in 1967/68. Because of the poor crop, there most likely has been little economic growth in Mali since 1967. With the improved agricultural situation for the present season, growth in real terms should again accelerate.

Agricultural Production

Agricultural production in the 1969/70 season rebounded from a bad year by increasing an estimated 17 percent to an index of 130 (1957-59 = 100). Grain output of 1.4 million tons will allow Malians to have adequate supplies and to replenish some of the depleted reserves. Livestock production is returning to its position of importance, but because herds were so adversely affected by the drought in 1968/69, it will require at least 2 years to rebuild animal numbers to their previous level. For this reason, meat production in 1969/70 is expected to remain below average.

After several years of declining marketings, Mali's commercial sales of peanuts are expected to move upward in the 1969/70 marketing season. It is expected that 50,000 tons will enter commercial channels, compared with 30,000 tons last year. Total 1969 peanut production is estimated at 120,000 tons. Peanuts are grown on about 7.5 percent of the total cultivated area and are an important foreign exchange earner. The higher producer prices offered for peanuts this season are expected to reduce movement of Malian peanuts into neighboring countries.

Mali has a peanut development project partly financed by the French Development Fund (FAC), to provide extension services, agricultural equipment, and production supplies. Average yields resulting from the project increased from 500 to 800 kilograms per hectare during the drought year, whereas yields from areas not under the program were drastically reduced. Some 49,000 hectares (121,000 acres) are covered by the program with the expectation that this will be increased to 63,000 hectares (156,000 acres) for the 1970 crop.

Cotton has become the most important export crop in Mali, and covers about 4 percent of the cultivated area. The French Textile Fiber Development Company has been instrumental in expanding cotton production in its zone. Production in 1969/70 is expected to reach 63,000 tons of seed cotton. Exports of cotton fiber reached 16,000 tons in 1968/69 despite the growing demand by Mali's own textile mill at Segou.

Agricultural Policy

As an incentive to farmers, the government has raised producer prices for the 1969/70 season between 15 percent and 30 percent for peanuts, cotton, rice, millet, and sorghum. The prices paid for livestock delivered to the modern slaughter house in

amako have also been raised to encourage ncreased marketings.

Mali has a price stabilization fund hich operates to support the prices of peauts and cotton for export and to subsidize etail prices of basic consumption goods so hey can be sold at the same price all over he country.

oreign Trade

Total imports for 1968 were valued at 34 million. France continued to be Mali's argest supplier of goods, accounting for 32 ercent of the total. Major agricultural mports were 31,000 tons of sugar valued at 4.2 million, cotton and textiles valued at 2.6 million and kola nuts valued at $1.2 illion.

Exports worth $10.7 million were reorded by the government. However, import atterns of neighboring countries indicate hat clandestine exports almost equaled otal recorded exports. Officially the most mportant agricultural exports were cotton iber worth $4.0 million, livestock worth 1.4 million, and peanuts worth $1.2 million. Livestock exports are seriously unerreported. An estimated 120,000 cattle nd 160,000 sheep and goats were actually xported each year, compared to the 44,000 attle and 19,000 sheep and goats recorded n the official statistics for 1968.

To meet emergency food needs during 969, Mali purchased 20,000 tons of rice rom Thailand and Egypt and 16,000 tons of illet from Argentina. The United States rovided 15,000 tons of corn under P.L. 480. rance donated 3,500 tons of flour. The ommon Market has granted an additional uantity of food grains to Mali to arrive uring 1970. The amounts are reported to be 0,000 tons of corn and 30,000 tons of lour. (Margaret B. Missiaen)

MOROCCO

Excessive and untimely rainfall helped ut overall agricultural production in 1969 rom bumper 1968 levels. Total output was till well above average--the 1.6 millionon wheat crop was the second largest on ecord. The gross domestic product growth ate which was 13 percent in 1968 leveled off in 1969, reflecting the strong influence of the agricultural sector on GDP movements.

The outlook is mixed for crops to be harvested in the spring and summer of 1970. Severe flooding in the Gharb, one of the richest agricultural areas in Morocco, damaged cereal, citrus, and sugarbeet crops in the region. While some replanting was possible after the floodwaters receded, damage in the area was nevertheless substantial. Rainfall was much heavier than normal throughout the country.

Agricultural Production

The 1968/69 agricultural season was disappointing when compared with the recordbreaking crops of the previous year. By any other standard, however, the 1969 harvest was a good one. The index of agricultural production was 135 percent of the 1957-59 average down from 162 in 1968.

Wheat output (estimated at 1.6 million tons) and barley production (at 1.3 million tons) were 30 percent below record levels of the preceding year due to the rains and resultant widespread leaf blight and rust in both Mexican and traditional varieties. Despite this drop total production of these major cereals was above average. The quantity of wheat entering commercial channels from the 1969 crop was not expected to exceed 305,000 tons or 19 percent of the total crop against 786,000 tons or 33 percent commercialized in 1968. An estimated 44,000 hectares (109,000 acres) of cereals, mostly wheat, were flood damaged, involving a loss of possibly 60,000 to 70,000 tons for the 1970 crop.

Early-season estimates of the 1969/70 citrus crop were for record production of almost 900,000 tons. The crop was early and of good quality, two factors which would bring premium prices for exports. The recent floods in an important citrus-growing area have reduced the prospects considerably. Approximately 5,000 hectares (12,000 acres) of citrus were affected to varying degrees. It is estimated that there will be an export loss of up to 60,000 tons, representing possibly $3 million. The citrus processing industry is expanding rapidly in Morocco. From the 75,000-80,000 tons finished in 1968/69, processing should increase to 200,000 tons by 1975. The

percentage of the crop processed depends more on fruit quality than on harvest volume.

The 1969/70 olive crop was reduced by 50 percent from a year earlier to an estimated 140,000 tons. The cutback reflects an off-year in the production cycle and adverse weather. Estimated oil output from the current crop is not expected to exceed 20,000 tons, which would be only 40 percent of the record large output from the previous olive crop.

Agricultural Policy

On July 29, 1969, government enacted an Agricultural Investment Code in an effort to arrive at more effective and economic land utilization. The Code recognizes the right to private ownership of farms but asserts that the owners must use their land in the national interest and reimburse the government for a part of its investments to improve the land. For example, farmers enjoying the benefits of irrigation will be required to pay approximately 40 percent of the cost. The farmer's contribution will consist of a fixed charge and payments for water. Plots of 5 hectares (about 12 acres) or less and the first 5 hectares of plots of 20 hectares (50 acres) or less will be exempt from the tax.

The USAID continued to support a cereals improvement project in Morocco. Activities include breeding and varietal development, research on fertilizer use, and production-management techniques. Efforts are being made to adapt the new high-yielding varieties of Mexican wheat to Moroccan conditions. Despite the Septoria blight problem encountered last season with the Mexican varieties, there is still considerable farmer interest in these varieties. A voluntary program with a minimum goal of 10,000 hectares (25,000 acres) was established and was expected to attract primarily the large modern operators. The recent floods had only a minor effect on the Mexican wheat, since there were limited plantings in the Gharb.

Foreign Trade

Morocco's total exports were valued at $450 million in 1968, up $26 million from 1967. Agricultural goods accounted for 45 percent of this total. Citrus fruit was the most valuable agricultural export fol lowed by fresh tomatoes and dried pulses (peas and beans). On a crop year basis, 1968/69 citrus exports were down 65,000 tons to 533,000 tons. Early estimates of exports from the 1969/70 crop were as hig as 750,000 tons. But these figures have recently been revised downward to about 700,000 tons, considerably above the leve of recent years. While Russia normally imports from 100,000 to 150,000 tons of oranges under a clearing account, the bul of the exported citrus goes to Western Eu rope, principally France. During the fir 10 months of 1969, Morocco exported almos 33,000 tons of olive oil from last year's press compared with an average of less th 7,000 tons for the 3 previous years.

The value of Morocco's total imports rose from $518 million in 1967 to $551 mi lion in 1968. Agricultural products made up 32 percent of this total. Wheat was the most important agricultural import fo lowed by sugar, vegetable oils, and tea. Morocco's need to import wheat varies rat widely from year to year depending on the size of the harvest. During calendar 196 Morocco imported only small quantities of wheat as a part of the "food-for-work" pr gram. Heavy carryover wheat stocks on June 30, 1969, offset the reduced 1969 cr and no imports had been required through early 1970. However, with a somewhat low rate of commercialization and declining stock levels in normally deficit areas, i ports of an estimated 150,000 tons of whe are being arranged to arrive prior to June 30, 1970.

Under the associate status granted Morocco by the European Community, effective September 1, 1969, certain Moroccan agricultural products, principally fresh citrus (excluding grapefruit) and olive oil, imported into the EC will receive pr ferential treatment. From the Moroccan side, tariffs were reduced on a number of manufactured goods on September 1, 1969. While the reductions were on a most-favor nation basis, they were of particular interest to EC exporters.

An important Moroccan-Cuban pact signed in December 1969 covers the 1970-7 period. Principal trade commodities are Cuban sugar (a total of 300,000 tons) and

Moroccan phosphate (120,000 tons). (Margaret B. Missiaen)

NIGERIA

The big news in Nigeria in early 1970 was the end of the civil war, which had been going on for 2-1/2 years.

The immediate problem has been the feeding and general welfare of the many refugees in the east. With offers of international aid coming in added to the resources available domestically, Nigerian officials believe the major part of the problem should be solved within the year. By the end of 1970, Nigerian agriculture should one again be able to supply virtually all of the country's basic food needs.

Reconstruction of the war-torn area is a longer-range problem. Most important to agriculture will be the repair or reconstruction of roads and railroads.

Nigeria's reconstruction is expected to be greatly helped by the resurgence of the country's petroleum industry. Several large international companies are tooling up to increase their petroleum extraction and refining operations. Other oil companies are seeking concessions.

Postwar recovery will be aided by the greater supply of electricity now available. Most of the increased electrical capacity comes from the hydroelectric generating plant at the Kainji Dam, which went on the line in December 1968.

Economically speaking, Nigeria emerged from the war in good shape. The war was mostly funded on a pay-as-you-go basis and no large war debt was incurred.

The government plans to rename its unit of money, the Nigerian pound, and also to adopt a decimal sub-unit. The Nigerian pound, now worth $2.80, is divided into 20 shillings, which are subdivided into 12 pence each.

Agricultural Production

Total agricultural output is estimated to have risen 1 percent in 1969 from that in 1968. Except for oil palm produce and rubber, farm production was not affected severely by the war. Production of palm oil and palm kernels had shown considerable recovery even before the war ended and additional improvement is expected for 1970. Much of the palm oil will be consumed domestically but a larger supply of palm kernels and/or palm kernel oil will be available for export.

Production of peanuts for 1968 was up as compared with 1967. In turn, the 1969 crop was somewhat larger than in 1968, although cotton is said to have encroached into peanut areas to some extent. There was some temporary buildup of inland peanut stocks from the 1968 harvest due to slow shipment to the coast. This, in turn, was due to a shortage of coal to run trains, deterioration of highways from heavy use, and congestion at the port of Apapa (Lagos).

Cocoa production during the 1969/70 season is estimated to be up from last year although weather conditions were less than ideal. Most observers feel that the announcement in the spring of 1969 of a 50 percent increase in the producer price of cocoa beans stimulated more and better cultural practices by cocoa farmers. This increased production this year and seems to foretell a bright future for Nigerian cocoa.

Nigerian cotton production during the 1969/70 season was at an alltime high. Better producer prices and good weather were primarily responsible for the increase. Nigeria's cotton textile industry continued to expand in 1969 and the demand for locally-grown cotton was good.

Foreign Trade

In May 1969, export duties on many important agricultural exports were increased from 10 percent to 15 percent. Commodities affected are: sesame seed, cocoa beans, lint cotton, cottonseed, peanuts, peanut cake and meal, peanut oil, palm kernels, palm kernel cake and meal, palm kernel oil, and palm oil (edible and technical).

Though wracked by civil war during all of 1968, Nigeria managed to export goods valued at $578 million. Since less petroleum than usual was exported, agriculture's

70-percent was larger than in years just prior to 1968.

Major agricultural exports in 1968 consisted of cocoa beans and products valued at $162 million (40 percent of agricultural exports), peanuts and products ($146 million or 36 percent), and oil palm products ($41 million or 10 percent). Other agricultural products included rubber worth $18 million, cotton lint and seed $12 million, hides and skins $11 million, benniseed (sesame) $3.3 million, shea nuts $2.4 million, gum arabic $1.7 million, coffee $1.4 million, and soybeans $1.3 million.

Since the civil war began in Nigeria, agricultural imports have come under greater restrictions than before. Such items as tomato paste, rice, and tobacco can be imported only by a special permit. In 1968, agricultural imports valued at $44 million made up only 8 percent of total imports of $541 million. Major farm imports included milk and cream ($10 million), wheat ($9.7 million), and sugar ($4.2 million). Lesser values were recorded for fruits and vegetables, jute, malt, essential oils, and unmanufactured tobacco.

The chief American farm exports to Nigeria in 1968 were wheat valued at $7.2 million, dairy products worth $3.5 million, and unmanufactured tobacco ($877,000). Nigeria was the United States' 50th largest customer for farm products.

On the return trip to the United States, freighters in 1968 carried Nigerian farm products with a total value of $25 million. Of this total, cocoa beans were worth $17 million; rubber was valued at $3.0 million; hides and skins, $2.3 million; and oils and oilbearing materials, $1.4 million. Nigeria is America's 44th largest source of supply for agricultural imports. (Snider W. Skinner)

RHODESIA

Agricultural Production

Increased agricultural production, which may have reached a value of $280 million, helped Rhodesia's gross national product grow by 7 percent (real terms) in 1969. Good weather was largely responsible for the increase in agricultural production. For some commodities Rhodesia produced more than needed for the domestic market and th export availability increased. Agricultur accounts for about one-fourth of the GNP and is by far the largest employer. It al provides many raw materials for industry, which has been growing rapidly since the unilateral declaration of independence (UD in 1965.

Although tobacco is still a leading crop, its importance has decreased since UDI. Production in 1969 was an estimated 62,000 tons, slightly higher than the 1968 crop. Tobacco trade data are not publiciz ed and tobacco marketings are held in stri secrecy. There apparently is a large stockpile of tobacco, reported to be in ex cellent condition, and some Rhodesian tobacco is finding its way into the world market.

In December, the Minister of Agriculture announced the government production target for the next two tobacco seasons. The target will be 45,000 tons (100 millic pounds) at a price of 32 cents U.S. (23 cents Rhodesian) per pound. This is a decrease in quantity from the current crop target; it is an increase in price. The new price and volume mean that growers may get at least $5.6 million less than from the previous crop. Although the Rhodesia Tobacco Association has rejected this plan the government appears to consider it necessary to reduce the amount it has beer spending to support the tobacco industry.

Sugar is probably the second most important commercial crop adversely affected by sanctions. Current production is much lower than pre-UDI crops and much land has been diverted from sugar to citrus and wheat. Production of sugar in 1969 rose slightly over 1968 production to 136,000 tons. This would have availed about 40,0(tons for export.

Since 1965, production of most commer cial crops other than tobacco and sugar ha tended to increase. Production of all grains, commercial and subsistence, rose i 1969 due to the good weather and expanded acreage. The corn crop was record high ar more than twice the 1968 harvest. Since 19 production far exceeded domestic demand, corn was exported--about 500,000 tons of

hite corn went to the Republic of South frica.

Before UDI, annual wheat production as less than 4,000 tons. The combination f expanded acreage and good weather result- d in a 1969 wheat crop of 27,000 tons. Pro- uction is expected to continue upward in he 1970's. Three-fifths of the crop is rown under irrigation in the lowveld where creage is continuing to increase. Although hodesia is still an importer of wheat, bout 90,000 tons in 1968, it plans to be- ome self-sufficient.

Rhodesia's 1969 commercial peanut crop as about 37,000 tons, much higher than 1968 utput. Production appears adequate to meet omestic needs. Peanuts are the leading ash crop for black farmers. Prior to UDI hey were the most important producers. How- ver, recently white farmers have increased heir production, especially under irriga- ion, and are now the leading commercial roducers. Peanut acreage for the 1970 crop as been increased, so a larger crop can be xpected.

Cotton is a very important diversifica- ion crop; production has increased rapidly nce 1965 and probably reached 45,000 tons n 1969. About 85 percent of the crop is rown by white farmers on irrigated land. nce this large crop exceeds the country's nning capacity, some probably was export- d. Although it is believed that cotton roduction will continue to increase, the ate of growth may slow down somewhat.

gricultural Policy

With the creation of the Agricultural evelopment Corporation (ADC), the Agricul- ural Finance Corporation (AFC), the Agri- ultural Research Council (ARC), and the gricultural Marketing Authority (AMA), the overnment's reorganization plan for agri- ulture has been completed. These now con- titute the four pillars of the agricultural ndustry. The reorganization began 2 years go with the establishment of the AMA to oordinate the operations of the three main arketing boards. A year later the ARC was et up to coordinate work of the many inde- endent research groups. The last two were ormed in 1969--the ADC to establish plan- ing priorities and the AFC to coordinate credit facilities available to the agri- cultural community.

More recently, the government estab- lished several organizations to promote development of the tribal areas. It is en- couraging the formation of local councils to carry out community development projects. These projects include building roads, dams, classrooms, and developing demonstration plots and irrigation schemes. After nearly a year of little action, the government- sponsored Tribal Trust Land Development Cororation has announced the first phase of a development project for the Seki re- serve, near Salisbury. Also a Tribal Areas of Rhodesia Research Foundation has been set up to raise funds for research on econo- mic development in the tribal areas.

These are just some of the efforts be- ing made to change the traditional economy to a commercial one. However, since the black population (approaching 5 million) is doubling about every 20 years, the change and growth necessary to support this size population is substantial.

Foreign Trade

Except for totals, Rhodesian trade data have not been published since 1965. For 1969, total exports are estimated at $320 million, about 70 percent of pre-UDI exports. Rhodesia reported a favorable balance of trade. It appears that both exports and imports were higher in 1969 than in 1968

Larger crops probably contributed to larger agricultural exports in 1969. Corn exports were higher than usual; South Afri- ca alone purchased at least 500,000 tons of corn. South Africa also purchased cot- ton from Rhodesia. Tobacco and sugar, major exports prior to 1965, are still be- ing exported, though in greatly reduced amounts. Mineral exports appear to be growing rapidly.

As far as can be determined, Rhodesia imports relatively few agricultural commod- ities. The more important of these are believed to be wheat and rice. However, Rhodesial production of these is increas- ing, so future imports should be smaller. At present South Africa appears to be

Rhodesia's major supplier. (Mary T. Chambliss)

SENEGAL

The outlook for 1970 is for recovery of the Senegalese economy. Senegal's economic situation, which depends in large part on farm production, was depressed during 1969 because of the drought-affected 1968 agricultural harvest. After reaching a high of $718 million in 1968, the gross national product for 1969 is thought to have been somewhat lower. Per capita GNP in 1968 was about $220. In 1969 farm production recovered from the previous year's low, and in 1970 GNP should again move upward to maintain the 10-year 5.5 percent average growth rate.

Agricultural Production

The 1969 growing season was a normal one and production returned to near average levels after 1968 drought. Output might have been larger except that fertilizer use dropped significantly as farmers reacted negatively to reduced incomes from 1968 crops and purchased much less commercial fertilizer than expected.

The index of agricultural production in 1969 was 138 (1957-59 = 100), up 22 points from 1968. Per capita food production was 106 compared with 91 for the previous year. The 1969 peanut harvest was estimated at 885,000 tons, 72,000 tons larger than the previous year's crop. Generally the trend in Senegalese peanut production has been downward since crops of 1.0 and 1.2 million tons were harvested in 1964 and in 1965. Peanut area was reduced an estimated 10 percent for 1969, to 900,000 hectares. Fertilizer consumption totaled 13,000 tons during 1969 as against an anticipated demand of 30,000 tons. Offsetting these negative factors was the considerable improvement in weather. The outlook for the Senegalese peanut industry is not encouraging. The world market for fats and oils has several important negative aspects, including the large supply of U.S. soybeans and palm products in other developing countries. There is little prospect for an increase in peanut oil prices in the next year. The important guaranteed market in France for Senegalese peanuts no longer exists. Common Market discussions on fats and oils policy spells increased marketing problems for Senegalese peanuts.

An estimated 650,000 tons of millett and sorghum, the staples of the Senegalese diet, were harvested in 1969. This tonnage should be sufficient to meet domestic needs throughout the next year. During the preharvest period of 1969, large quantities of sorghum, corn and other grains for food had to be imported to prevent widespread starvation.

Rice production in 1969 at 140,000 tons is believed to have surpassed the previous record-high level experienced in 1967. But Senegal will be short of this basic foodstuff in 1970 and imports will be required for several years despite extensiv rice development programs. The USAID rice project (in cooperation with the Taiwanese) in the Casamance area shows promise in expanding rice output. About two-thirds of Senegal's total rice consumption is imported.

Cotton production is gradually increasing. The 1969 crop is estimated at 12,000 tons of unginned cotton. With assistance being given by the French Textile Fiber Development Company and the European Development Fund, Senegal expects to produce 25,000 tons of unginned cotton (8,000 tons cotton lint) annually by 1971/72. This indicates that cotton imports will decrease over the next few years as domestic production supplies more of local requirements.

Agricultural Policy

The third Senegalese Development Plan became operational July 1, 1969, with major emphasis on agricultural production. The plan is an effort to lessen the economy's dependence on peanuts and to reduce the present level of food imports which are mainly rice, sugar, vegetables, milk and fruit. Irrigation facilities will be greatly expanded to extend Senegal's agriculture into presently unproductive areas. Emphasis will also be placed on farm enlargement and mechanization. The plan also emphasizes fisheries, and the hope is to build a larger export market for fish products. Total investment is to be $46.8 million over a 4-year period. One-third of the investment is to be from domestic sources,

and two-thirds will be obtained from external sources.

Foreign Trade

Despite an increase of 10 percent in exports in 1968, Senegal's trade position worsened owing to a rise of 15 percent in imports. The largest category of imports, comprising food, beverages, and tobacco, amounted to $65.6 million out of total imports valued at $180.2 million. The largest single commodity import was rice--185,000 tons valued at $28.3 million compared with 153,000 tons in 1967. France was the main source of imports, supplying 44 percent of the total. Other sources were Germany, Cambodia, the United States, the Republic of China, and Italy, in that order.

The volume of exports increased more than their value, owing to lower prices for peanut products. Total exports for 1968 were valued at $151.4 million. Exports of peanut oil increased from 162,000 tons in 1967 to 198,000 tons in 1968, but the value of these exports fell from $58.3 million to $43.8 million. Shelled peanuts worth $33.2 million and peanut cake worth $21.9 million were exported in 1968. Peanuts and peanut products as a percentage of total exports decreased from 78 percent to 72 percent between 1967 and 1968. There were increased exports of other products processed or manufactured locally such as fertilizer, wheat flour, shoes, and cotton textiles, an indication of the effort directed toward diversification of the Senegalese economy. (Margaret B. Missiaen)

SIERRA LEONE

Improvement in Sierra Leone's economic condition began in 1968 and continued throughout 1969. Most of the credit for the brighter economic picture must be given to the nonagricultural sector. However, some improvement occurred in the agricultural sector, especially the financial recovery of the Sierra Leone Produce Marketing Board (SLPMB).

In 1968 Sierra Leone had a favorable trade balance. During the first half of 1969 exports showed a satsifactory increase but imports showed an even bigger increase. Thus, only a slight surplus was expected for the full year 1969. Because of the country's limited industrial potential and the absence of import controls, increased purchasing power was reflected very quickly in the form of increased imports. Thus, some deterioration in the country's balance of payments can be expected in 1970.

Today's improved financial situation is due to the deflationary policies put into effect by the previous military regime and continued by the present civilian government. The present government is determined to continue strict controls over expenditures. It is also seeking to avoid uneconomic projects and to maximize the use of local resources. This policy, however, leads to difficulties--a slow rate of economic growth (currently 3 percent), rising unemployment, substantial price inflation, and some worsening in income distribution. There are also some problems associated with increased urbanization.

Considerable improvement has occurred in agriculture, although this sector did not fulfill its export potential. The prospect of finding "illegal" diamonds continues to attract large numbers of the most able farm people. The diamond fields have not lost their lure in the years since Sierra Leone's diamond rush began in 1954.

Agricultural Production

By increasing a little more than 2 percent, agricultural production in 1969 reached 123 percent of the 1957-59 base.

Palm kernel purchases by the SLPMB between January and August 1969 totaled 36,407 tons, an increase of 6 percent over the same period in 1968. Because producer prices had been raised, an even larger increase had been anticipated but many upcountry roads and bridges were flooded by heavy rains, causing disruptions in palm kernel transport.

Heavy rains in June-August 1969 (the cocoa flowering period) caused an increase in black pod disease. In consequence, the 1969/70 cocoa bean crop is estimated at 3,000 tons, about 70 percent of the previous year's crop. Since world cocoa prices are high, SLPMB's will likely continue profitable.

Sierra Leone is a major world producer of piassava (palm fiber), used in making street brooms, scrub brushes, and the like. In 1968, many piassava producers boiled their crop, sometimes with caustic soda, to speed up the retting process. As a result, offerings to SLPMB were poor in quality. The piassava situation became so bad in early 1969 that the government took the unusual step of closing the buying season. In August 1969, piassava was removed from SLPMB's buying schedule and exporting was turned over to private firms. Government produce inspectors were instructed to be stricter about piassava quality. As 1969 ended, it was anticipated that the quantity and proportion of prime grade piassava produced would return to normal by the end of 1970 or 1971.

Sierra Leone's 1969/70 coffee crop was estimated at 5,400 tons (90,000 bags), slightly less than the 1968/69 crop of 5,700 tons (95,000 bags). The downturn was attributed to the normal cyclical pattern of tree yields and because the heavy mid-1969 rains did some damage to coffee blossoms. In 1968/69, domestic production was thought to have been substantially inflated by an inflow of coffee from neighboring countries, particularly Guinea. Purchases by SLPMB far exceeded Sierra Leone's Annex A quota under the International Coffee Agreement and coffee stocks piled up, causing a strain on Board finances and storage space.

Sierra Leone continues to grow more tobacco than can be manufactured at the cigarette factory at Wellington. Efforts are being made to find export markets, but low quality of the leaf and the high overhead costs of growing and exporting make profitable overseas sales difficult.

Efforts to increase production of rice, Sierra Leone's staple food, have made slow but steady progress over the years. These efforts received a slight setback in 1969 when heavy rains during the growing season caused flooding in the upland production areas and in mechanically-prepared areas of the south. Reduced harvests in these areas were partly offset by higher yields in the bolilands which benefited from the heavy rainfall.

In 1969, production of other food crops --including peanuts, yams, corn, guinea corn (grain sorghum), citrus fruit, pineapples, and bananas--was at or above the 1968 levels.

Agricultural Inputs

Fertilizer consumption, an indicator of agricultural development, likely totale 1,500 tons in 1969, up about 400 tons over 1968. About 75 percent was phosphate for use on boliland and swamp rice fields. Fertilizer consumption has more than doubled in 2 years.

There has also been some increase in the area under irrigation by water control methods recommended by Taiwanese technicia for use on inland swamp rice and vegetable farms. These methods increase both yields and length of growing season.

Foreign Trade

Sierra Leone's foreign trade picture in 1968 was rather bright, considering tha exports improved considerably, almost matc ing imports. Each was valued at almost $9 million. This contrasts with a 1967 unfavorable trade balance of about $27 milli

Agricultural exports in 1968 consiste mainly of palm kernels valued at $8.6 million, coffee at $3.8 million, cocoa beans $2.8 million, piassava $1.1 million, ginge $398,000, and kola nuts $235,000.

Nonagricultural exports--particularly diamonds ($55 million) and iron ore ($13 million)--were much more valuable than far exports.

In 1968, the United Kingdom was by fa Sierra Leone's best customer, followed by the Netherlands and West Germany. Sierra Leone's largest suppliers were the United Kingdom, Japan, and the United States.

In 1969, the first shipment of 600 hundredweight of flour milled in Sierra Leone was exported to Gambia. Another trade first was the shipment of 26 tons of cassava chips to West Germany. (Snider W. Skinner)

REPUBLIC OF SOUTH AFRICA

The gross domestic product of South Africa reached $16.4 billion in 1969. In

terms of 1958 prices, real growth was an estimated 6 percent; 1970's growth will likely be about the same. The agricultural sector accounted for about 8 percent of 1969's GDP.

Agricultural Production

Production of grains was mixed in 1969. Drought early in the year in the Maize Triangle caused corn production to fall to slightly less than 5 million tons. Prospects for the 1970 crop appear better than usual since early rains were excellent in the main corn growing area. However, rain in January and early February was spotty in other areas. The area planted to corn decreased this year but production should be high. March estimates of the 1970 corn crop range from 7.6 million tons to 9 million tons. The 1967 crop of 9.8 million tons was the largest on record.

Sorghum production in 1969 was slightly higher than the previous crop. Area planted for the 1970 crop is up from last year, and with an expected increase in yields, production will be higher. Sorghum is used primarily as a brewing ingredient for "Bantu" beer, consumption of which is increasing.

The 1969 wheat crop was a record 1.3 million tons. Production in 1970 is expected to prove slightly higher. Although the Cape wheat area suffered from drought, production in the Orange Free State and the Transvaal was so exceptional that the overall crop was excellent. Wheat consumption is continuing upward due to population growth.

Fruit production last year was generally lower than in 1968. Most of this decrease was due to adverse weather; a virus infestation among apricot trees also affected production. The pear harvest, falling to 73,000 tons, was adversely affected by hailstorms. The apple crop likely reached 216,000 tons, up 2 percent. Peach, apricot, and plum production decreased slightly. Total deciduous production for 1969 was an estimated 574,000 tons. Pineapple production fell about 6,000 tons to 130,000 tons. Production of oranges, the main citrus, was 517,000 tons, down from the record 1968 crop of 520,000 tons. Drought conditions in the southern part of the country early in 1970 appear to have affected this year's fruit crop.

South Africa is the world's seventh largest producer of sugar from cane. It is a member of the International Sugar Agreement and has a quota from the United States. Although South Africa's U.S. sugar quota is not large, there has been some pressure within the United States to decrease or remove it. Production of sugar in 1969 increased to nearly 1.6 million tons from 1.5 million the year before. Since the introduction of the new sugar agreement, prices have increased, and prospects for the South African sugar industry appear brighter than they have been for sometime. Domestic sales are also up. During recent years, South Africa has followed an expansion program for sugar production. However, with acceptance of the new international agreement, no increase in production is being allowed at present.

Peanuts are the largest oilseed crop in the Republic, closely followed by sunflower seed. In 1969 the peanut crop (in shell) was 344,000 tons, the second largest crop on record. This was due to larger area planted, good rains during the end of February and March, and sunny weather at harvesttime. Local consumption used most of the crop, but some confectionary quality nuts, some oil-crushing nuts, and some peanut oil and cake were exported. It appears that a greater area was planted for the 1970 crop.

The general trend of cotton production in the sixties was upward. Although 1969 production fell slightly to 22,000 tons, this was much higher than production in the early sixties. Larger areas, both dryland and irrigated, are being planted and yields are increasing.

Wool is South Africa's most important agricultural export commodity; it accounts for about 5 percent of total exports. South Africa is the world's fifth largest producer of wool. In 1969 the clip was about 145,000 tons, 7,000 tons above the previous one. Prices during opening auctions of the 1969/70 season tended to be higher than during the same period a year earlier, but a little lower than prices at the end of May 1969.

Livestock numbers showed a general increase during 1969. Slaughterings of cattle and calves decreased, folowing a downward trend since 1965. The small stock and hog kill rose. Overall it appears meat production decreased slightly. Estimated per capita consumption of beef appears to be decreasing, probably because of higher retail prices. But consumption of mutton, pork, and poultry appears to be increasing. Poultry meat is now more important than pork for domestic consumption and will continue increasing its share of the market.

Agricultural Policy

South African authorities continued their policy of maintaining agricultural production by supporting measures to stabilize prices to producers. This policy is carried out mainly by various marketing boards. A joint marketing board for all canning fruit might come into effect this year. The proposed new board would control the marketing of all apricots, peaches, pears, and pineapple intended for canning. A control board for cotton has also been proposed. It would be used for (1) price arrangements, (2) grading and standardization, (3) effective distribution of the crop, and (4) market promotion.

In June 1969, the Minister of Agriculture announced a stock-reduction scheme for sheep grazing areas to stabilize the veld, where deterioration and soil losses have reached alarming proportions.

In 1968 the third revision of South Africa's Economic Development Program concluded that an annual average growth rate of 5.5 percent should be realized for the period 1968-73. So far, estimated growth exceeds this rate. To meet the increased labor demand expected, especially of skilled workers, net immigration of at least 30,000 per year is considered necessary. Priority will also have to be given to training local manpower. The largest contributors to programmed economic expansion will be manufacturing and, to a lesser extent, services. The percentage contribution of mining industries and agriculture will decline, though the absolute value may rise.

Within the general policy of economic growth, the South African government has a policy of economic development in the black population areas. One of the largest of these is the Transkei, where the Xhosa Development Corporation has been formed. The Transkei has just suffered a 6-year drought which had very adverse effects on crops and cattle. As a result, special efforts are being made to improve farming practices and build as many water catchment basins as possible. An example of this effort is the tractor program. The program appears successful, but limited by the relatively small number of machines.

Foreign Trade

During 1969 South Africa's trade deficit was $836 million, larger than in 1968. This gap reflects trade in goods and services; it does not include trade in gold. The Republic's imports during 1969 were valued at $2,995 million; exports were worth $2,159 million. Imports increased by $364 million; exports, by only $44 million. Europe remained South Africa's major trading partner, both in buying and supplying; however, trade with Asia is increasing rapidly. South Africa is the United States' largest commercial market in Africa. The U.S. share of the South African market, which fell slightly in 1969, is about 17 percent.

Agricultural exports from South Africa declined in 1969. Most of the decrease was due to the small corn exports. Corn exports were discontinued temporarily in early March 1969. During the rest of 1969 South Africa imported at least 500,000 tons of white corn from Rhodesia. Upon completion of arrangements to import this white corn which would satisfy the local market, South Africa cleared exports of some 180,000 tons of corn (mostly yellow) late in the year. Barring unfavorable late-season crop developments, South Africa should export substantial amounts--possibly as much as 3 million tons--of corn during the 1970-71 marketing season mostly to Japan, the United Kingdom, and Europe.

Exports of other agricultural products in 1969 appeared mixed. Some fresh fruit exports, such as apples, increased slightly; others, such as pears, decreased. Canned pineapple exports decreased; but exports of

anned peaches were estimated to have continued their upward trend. Citrus exports ecreased slightly; sales to Europe fell by percent. Sales of lemons and grapefruit ncreased in the United Kingdom, but not nough to offset other decreases.

Increased amounts of wool were available for export last year. France, the nited Kingdom, Japan, and Germany are the argest importers of South African wool. Exorts of karakul pelts were smaller in 1969.

South Africa is a net importer of coton, but imports have been gradually dereasing in recent years. Imports were bout $14 million last year. The United tates and Brazil are major suppliers. Reently, Brazil's share of the market has inreased, while the U.S. share has decreased. his is mainly due to lower Brazilian cotton rices. South Africa does export some coton, mostly of a type not needed by local extile mills.

Although South Africa exports some eat, primarily special cuts to adjoining ountries, it imports much larger quantiies. Most of the shipments from Namibia South West Africa) and Swaziland--are on ne hoof, but no beef comes in on the hoof rom either Rhodesia or Botswana. This akes South Africa a large net importer of eef and veal; a small net importer of mutton, lamb, and goat; and a small net exportr of pork.

The largest agricultural imports in the ast have been wheat, rice, and cotton. outh Africa's self-sufficiency efforts in neat production have greatly reduced wheat mports. Only 11,000 tons were imported in 969. Ten thousand tons came from Lesotho nd Swaziland and a thousand tons from Eupe. The United States sold no wheat to ne Republic last year and it is unlikely nis will change in 1970. The United States oes continue to be the major supplier of ice. The U.S. dock strike in 1969 reduced .S. rice exports, but in 1970, rice exports nould be back at the 70-80,000 ton level. Mary T. Chambliss)

SUDAN

The economy entered 1970 with rising rices for both domestic and imported goods, dwindling foreign exchange reserves, and continuing trade deficits. Price-control measures adopted in 1969 have not taken effect. And businessmen state that they are increasingly feeling the adverse economic impact of the Suez Canal closure.

Agriculture accounts for over half the country's gross national product estimated at $1.54 billion in 1969 for a per capita GNP of $102. There are an estimated 15.2 million Sudanese (mid-1969) of which 77 percent live in rural communities. Eighty percent of the 6.4-million-member labor force is employed in agriculture.

Agricultural Production

Largely because of an excellent cotton crop, agricultural production showed a moderate increase in 1969 to an index of 156 (1957-59 = 100). The cotton crop was 240,000 tons of lint, an increase of 11,000 tons over the good crop of 1968.

Sudanese grain production was estimated at 1.5 million tons, up 16 percent over the 1968 harvest. Durra, a grain sorghum, accounts for two-thirds of all grains produced. The 1969 sorghum harvest probably reached 1.0 million tons, up 200,000 tons over the poor 1968 crop, but far below production in good years.

Inadequate sorghum supplies plague government officials. Exports were banned in 1969 and drastic measures are promised to stop smuggling. In efforts to control rising prices, the government has made overtures to purchase 250,000 tons of grain.

Agricultural Policy

In 1969, Sudan fell to a military coup d'etat. As a result, most agricultural and trade policies are still in the formative stage.

West European countries have traditionally supplied most of Sudan's imports. A change in import policy for 1969/70 favors those countries with which the Sudan has barter, loan, and trade-payment agreements. That means priority is being given to imports from the United Arab Republic, India, East Germany, Poland, Czechoslovakia, Hungary, USSR, Yugoslavia, and Bulgaria. The 1969/70 import budget has been set at $230

million with imports from West European countries restricted to the value of cotton they import from the Sudan.

Cotton exporters have been offered a bonus to maintain cotton exports at a high level for 1969. Cotton annually accounts for 50 to 75 percent of Sudan's annual export earnings.

The Ministry of Agriculture has dissolved the boards directing the Mechanized Farming, Public Agricultural Production, and Agricultural Research Corporations. These will be reorganized along with all other government-sponsored independent corporations after the Council of Ministers resolves policy differences. In another move, the new government has authorized the Gum Arabic Company Ltd. to sell $3.4 million worth of stock. The government will retain 30 percent of the million shares to be issued and the firm's board of directors, composed of 100 of the leading exporters, will have veto power over prospective applicants for stock.

In September 1969, relations with the Egyptians were strengthened with a technical assistance agreement. Under it the United Arab Republic will help Sudan develop irrigation in the Sudd area of the Upper Nile Province.

Foreign Trade

Virtually all the Sudan's exports are agricultural produce. Cotton and gum arabic lead the list by value. Other commodities include peanuts, sorghum, sesame, live animals, and hides and skins. Exports in 1968 were estimated at $233 million and imports at $258 million. The United Kingdom, India, Japan and Russia were the leading suppliers while West Germany, Italy, India, and Japan were the leading markets for exports. Seventeen percent of Sudan's 1968 imports by value were wheat and flour, sugar, coffee, tea, and other food products. (William F. Hall)

TANZANIA

Agriculture is the most important sector in Tanzania's economy and the mainstay of its economic growth. Although agriculture's contribution to the gross national product declined during the 1960's from near two-thirds to a little more than a half, much of the country's foreign exchange comes from cash crops. Therefore, agriculture can be expected to maintain a very important place in the economy.

Tanzania's economy has also been bolstered by a steady inflow of foreign aid which will likely continue for several years, at least while projects are being completed. The United States is building a highway, Italy has been laying a pipeline, and the People's Republic of China is starting to build a rail line that will link up Zambia's copper vields with Tanzania's ports.

Agricultural Production

Since 1966, agricultural outturn has more or less leveled off. The major grain crops--millet and sorghum, and corn--produced well in 1969. Cloves produced well in 1968 by yielding 14,000 tons, then dropped to an estimated 4,000 tons in 1969. The coffee crop, better than average in 1968 at some 55,000 tons, fell to 48,000 tons in 1969. Registering the largest decline of a major crop, production of sisal dropped from 220,000 tons to 200,000 tons, continuing its downtrend. After a bad year in 1968 cotton production last year was back up to 1965-67 average--71,000 tons.

Livestock production, considered to have great potential for development, has more or less kept pace with the needs of the growing population. Most of Tanzania's livestock products are used domestically. In 1968, only about $6.3 million worth of meat were exported, plus small quantities of wool and hides and skins.

Agricultural Policy

Because of government encouragement, production of cash crops will soon be greater than production of those used domestically for subsistence crops. The government has established a number of statutory authorities which supervise, control and/or handle various functions of the management and marketing process. Many agricultural products are under the direction of government-created cooperatives and marketing boards. The policies and operations of the various boards, however, are by no means

niform. Some of the more recently estab-ished boards assume advisory and management unctions, but nearly all handle the pricing nd the final sale of crops. As with other unctions, the pricing policies of the oards also vary. Some maintain funds for rice stabilization and assistance while thers announce a set price to be paid be-ore the crop is harvested.

Cooperatives have expanded rapidly to ssist with inputs, extend credit, and pro-ide other services; an increasing number re carrying on some retail trade activities the company store role).

To control imports, Tanzania is promot-ng a policy of self-reliance through import estraints aimed at consumers. This program alls for import substitution with locally roduced and processed items.

Tanzania, Kenya, and Uganda form a re-ional common market. They maintain a com-on external tariff and a common customs dministration.

Tanzania's agriculture will likely con-inue its present gradual upward trend; di-ersification will help. More of agricul-ure's produce will be marketed through oards, and cooperative societies are being irected to step up retail selling to farm-rs. Already an announced policy, addition-l attention will be focused on livestock roduction through breeding and feeding pro-rams and improvements in forage. Growth in ther sectors will also have a favorable ef-ect on the farming sector.

oreign Trade

Tanzania's total exports in 1968 amount-d to about $240.5 million. Agricultural xports accounted for over 73 percent of the otal. Cotton, coffee, sisal, cashews, and loves were the leading items exported. The nited States ranked sixth as an importer of anzania's products and most of the U.S. urchases were agricultural items; coffee nd pyrethrum led the list.

Imports in 1968 totaled some $256.7 illion, of which about 11.8 percent were gricultural items. Cereals and cereal pre-arations and dairy products were the main tems purchased, but smaller quantities of any other food items were imported. In 1968 the United States supplied Tanzania with American farm products valued at just over $1 million. (H. Charles Treakle)

TUNISIA

Tunisian agricultural production de-clined in 1969, reflecting poor growing conditions. Drought struck early in the year and the September-October rainfall was the heaviest in centuries. Practically all annual crops had been harvested at flood-ing, but tree crops--particularly olives and dates--were damaged by the heavy rains. The floods did serious damage to other sec-tors of the Tunisian economy. During the first part of the year some economic pro-gress was being made. Foreign trade and overall production were trending upward. The floods caused the loss of several hun-dred lives, drowned a large number of live-stock, wiped out major roads and rail lines, and undid years of work in many areas where intensive irrigation projects had been un-dertaken. Exports of phosphate rock, one of Tunisia's major resources, were cut back drastically. It is hoped that, in the long run, the increased ground water supplies will have a beneficial effect on agricultural output.

Agricultural Production

Continuing drought conditions early last year were reflected in slight to con-siderable reductions in the 1969 harvest of principal crops. The index of agricul-tural production fell 15 points in 1969 to 78 (1957-59 = 100). Total wheat production was estimated at 350,000 tons (80,000 tons soft wheat and 270,000 tons durum) from about 640,000 hectares (1.6 million acres), down 33,000 tons from the previous year. Barley production, at 70,000 tons, was near-ly one-third below the 1968 harvest of 100,000 tons. Government support prices to producers for the 1969 crop were $83 per ton for soft wheat, $92 per ton for durum, and $54 per ton for barley.

Although harvesting of 1969 grain and pulse crops was completed prior to the rains and floods, planting of the 1970 grain crops was delayed in some areas because of the wet fields. Helicopters were used on a limited scale for seeding wheat in some of the wet-test areas. Planting delays could be offset

by the advantages of ample soil moisture; the 1970 harvest outlook is generally optimistic.

The current olive crop suffered from the effects of prolonged drought. Later, the excessive rains damaged the ripening olives and in some cases destroyed olive trees. In addition, it was an off year in the olive production cycle. The 1969 crop was estimated at only 125,000 tons with an expected oil yield of 27,000 tons--down sharply from 275,000 tons of olives and 55,000 tons of extract in 1968. Trade sources believe that with current soil moisture conditions the 1970 olive crop could exceed 500,000 tons with an oil yield of up to 110,000 tons. The area under olive production is estimated at 985,000 hectares (2.4 million acres) with around 35 million producing trees. The government's program to plant new areas to olive trees continued in 1969.

The total 1969/70 citrus crop is forecast at 72,000 tons--down about 5,000 tons from the preceding season. Scale has affected a good deal of the crop, reducing its quality.

Livestock losses resulting from the recent floods probably were 15,000 to 20,000 head, mostly sheep and goats. However, the loss of animals has been offset by greatly improved grazing conditions as a result of sufficient soil moisture. Overall, the condition of livestock in early 1970 was excellent. The improved grazing and forage conditions should lead to increases in livestock numbers.

Agricultural Policy

Tunisia's agricultural cooperative (collective) movement, which involved about 2.4 million hectares (6 million acres) at its peak was scheduled to encompass its agricultural sector by the end of 1969. The movement was stopped as a result of continued and widespread dissatisfaction by agricultural producers and trade groups. Currently, the records of existing cooperatives are being examined to determine which holdings will be returned to private ownership. The agricultural law of September 20, 1969, set forth certain categories that would revert immediately to the private sector--all fruit and vegetable production and production from irrigated land. Initially, cooperatives existing as of January 1, 1969, could continue to function. However, the current evaluation reaches all cooperatives and only viable units and those units with member support probably will continue. It is too early to determine how much land has actually been returned to the private sector, or how much is likely to be returned before the government completes its evaluation. Despite current short-term uncertainties over the responsibilities and functions of the various sectors involved, support for the current policy is enthusiastic throughout the country. This may lead to subsequent gains in overall agricultural production and improvements in marketing practices.

Foreign Trade

The value of Tunisia's total exports for 1968 was $157 million, up $8 million from 1967. Agriculture's export share of the total remained at about one-third. Some 33,000 tons of olive oil worth $22.5 million were exported, mainly to France, Russia, Libya, and Italy. Next in agricultural export value came fruits and vegetables valued at $12.6 million, with citrus contributing $3.1 million of this total. Wine exports of 68,000 tons were valued at $6.8 million in 1968.

On a crop-year basis, exports of agricultural commodities are likely to be down during 1969/70. Exports of olive oil are not expected to exceed 15,000 tons during the current season, compared with 32,000 tons in 1968/69. Citrus exports were estimated at about 30,000 tons for 1968/69 and are forecast at about that level for the current marketing year. Approximately 80 percent of the 1968/69 citrus exports consisted of oranges.

Total imports during 1968 were valued at $217.5 million with agricultural goods making up 26 percent of the total. Cereals valued at $23.8 million were the main imports. Wheat and flour imports were worth $20.5 million. The United States supplied almost 70 percent of these imports, largely under P.L. 480 agreements. Vegetable oils worth $6.2 million (also provided largely under P.L. 480), sugar worth $5.5 million, and dairy products worth $4.9 million were also imported. Forecasts indicate that

unisia will need to import up to 430,000 ons of wheat and 80,000 tons of barley dur- ng 1969/70.

Official foreign trade figures put Tu- isia's trade deficit for the first 9 months f 1969 at $60 million, nearly 18 percent ore than last year's imbalance for the same eriod. Tunisia's exports cover only 67.2 ercent of its imports. Its balance of rade was more unfavorable at the end of the ear because the floods temporarily cut off portant phosphate exports.

An association agreement with the EC ntered into force September 1, 1969. It llows Tunisian industrial products to enter le Common Market duty and quota free. Tuni- a's citrus will bear only a 4 percent duty nstead of the common external tariff of 20 ercent; however, this provision means that uty-free entry privileges on the French arket were replaced by the 4 percent duty. unisian olive oil will benefit from a $50 er ton conditional preference if the mini- um price is observed. (Margaret B. ssiaen)

UGANDA

Uganda's agricultural progress during 69 was moderately upward for all major rops except coffee. That deviation was ough to lower the index of agricultural roduction to 130 percent of 1957-59 base-- ightly below the index for 1968, when anda had a record coffee crop.

Prospective price gains for cotton and ffee--Uganda's two most important export ops--should improve export revenues in 70. This favorable outlook contrasts arply with the 1969 picture, which was ouded by political turmoil.

ricultural Production

Minor production gains were recorded 1969 for such subsistence crops as mil- t, sorghum, corn, pulses, cassava, sweet- tatoes and plantains. The corn crop taled 325,000 tons, up 5,000 tons from 68. Raw sugar production was record high 159,000 tons. Fruit and vegetables pro- ced good harvests.

Tea production was at a record level, t the coffee harvest of 165,000 tons was well below the 189,000-ton output of 1968. For coffee this was considered a return to near-average production after a bumper crop. The government enacted two significant coffee marketing changes in October 1969. Beginning with the 1969/70 International Coffee Agreement year, the Coffee Marketing Board will be the only exporter of Uganda coffee. And cooperatives will have a monopoly in buying from the farmers, pulping, and selling to the board all coffee except washed robustas.

Cotton production was unchanged from 1968.

Agricultural Policy

In October, on Uganda's seventh anniversary of independence, President Obote announced a "common man's charter." Its purpose is to advance measures toward a more even distribution of the country's economic and social benefits. While the charter was not specific, it indicated a move to consolidate many of Uganda's small farms into larger, more economic units. Just what changes will result from the new charter cannot be projected.

Recently, however, the Ministry of Agriculture and Forestry confirmed that its future policy would be one of discouraging fragmentation and encouraging consolidation and enclosure. It was distributing more educational materials and stepping up its attempts to improve and diversify the agricultural sector and to expand conservation.

Uganda has joined other major tea exporting countries who have adopted the "Mauritius export restriction plan." Under it, tea exports are limited during 1970 in an attempt to rescue falling tea prices and keep the world market price at or near the 1968 level. This will probably not seriously reduce Uganda's tea exports as the quota for Uganda is not stringent.

Kenya, Tanzania, and Uganda form a regional common market and they maintain a common external tariff and customs administration.

Foreign Trade

Uganda's total exports in 1968 amounted to $213.2 million. By value, 82 percent of them were agricultural, including coffee

(57 percent), cotton (about 24 percent), tea (6 percent), and the balance a variety of livestock and crop items. The United States is Uganda's number one overseas market. U.S. purchases in 1969--virtually all of agricultural items--were valued at $45.9 million.

Uganda's 1968 imports totaled $162.2 million, and only 7.2 percent were agricultural items. Cereals, fruit, and vegetables were the principal items purchased. The United States ranked sixth as a source of imports, but supplied only a very small portion of Uganda's agricultural imports. (H. Charles Treakle)

UNITED ARAB REPUBLIC

Despite the severe difficulties stemming from the Middle East war of 1967 and its aftermath, economic activities in the United Arab Republic showed signs of improvement in 1969. Indications are that total agricultural production reached a record high. Substantial gains were reported for cotton and all major grain crops. The gains coupled with greater industrial production, particularly in the oil sector, might well mean that GNP growth in 1969 exceeded the annual rate of 5.5 percent in recent years.

The United Arab Republic had a trade deficit of $465 million in 1965. By the close of calendar 1968, this imbalance had been reduced to $44.3 million. Moreover, preliminary data for the first three quarters of 1969 suggest that the reduction has continued. Loss of foreign exchange earnings from reduced tourism and continued closure of the Suez Canal has been partly offset by greater economic assistance from Eastern Europe and neighboring Arab countries.

Agricultural Production

Agricultural production in the United Arab Republic continued on an upward trend for the third consecutive year in 1969. The index of agricultural output rose to 122 percent of the 1957-59 base, up 7 points from the 1968 level. The increase was enough to reverse the downtrend since 1962 in agricultural production on a per capita basis.

Reports indicate that cotton area in 1969 approached 770,000 hectares (1.9 million acres), slightly over 10 percent abov a year earlier. Higher yields combined with a larger area boosted output to 511,0 tons, up 17 percent above from the 1968 ha vest. Some of this increase was attribute to favorable growing conditions. More important were renewed efforts by the govern ment to expand the cotton area and to improve quality and yields by the use of price incentives.

More water was available for rice production. Early estimates place the rice harvest at over 2.5 million tons. Thi estimate was a bit optimistic. It now appears that 1969 rice production exceeded the 1968 crop of 2.35 million tons by abou 90,000 tons. Lesser gains were indicated for the other major grains. Cotton and rice probably had the largest area increas of all crops planted.

A higher output of cottonseed was associated with greater cotton production fo 1969. Slightly larger crops of other oilseeds were expected. Increased area and production were indicated for onions, the third ranking export crop. Improvements also were estimated for sugar, citrus, and vegetables.

Little change was reported for the livestock industry. Production of livestock products in the UAR remains insufficient for the domestic market even though per capita consumption of meat and milk is low. Increased reliance must be placed upon imports to meet local needs.

Agricultural Policy

Renewed emphasis was given to programs designed to promote basic structural changes in the economy. Redistribution of agricultural holdings was continued along with efforts to consolidate small units and fragmented holdings. Cooperatives assumed more activities previously carried out by private intermediaries in the agricultural sector. The process of extending state ownership and control in other parts of the economy was continued with the result that almost all large-scale enterprise are now a part of the public domain.

The government relied increasingly upon fiscal policies to reduce inflationary pressures and improve the country's balance-of-payments position. Foreign exchange regulations were revised to reduce imports and to limit them solely to essential items. New price measures were adopted in hopes of stabilizing consumer prices, greater efforts were made to keep wages in line with productivity, and more crops came under the government's guaranteed price program. These measures, along with increased efforts to expand exports, appeared to strengthen the economy as the year progressed.

Foreign Trade

Data for calendar 1968 suggest that total exports were valued at $621.7 million; imports were valued at $666.0 million. This represented a 10-percent increase in the value of exports from the preceding year and a 17-percent decline in imports.

According to reports by the Egyptian Ministry of Economy, exports of agricultural products rose $7 million during the first three quarters of 1969 over the corresponding period a year earlier. Increases were reported for rice, citrus, onions, potatoes, peanuts and garlic. Additional export gains in these commodities are forecast for 1970.

Cotton exports declined. During the crop year ended August 31, 1969, they amounted to 246,300 tons against 271,720 tons in the preceding year. The leading buyers by importance were the USSR, Japan, India, Italy, Czechoslovakia, West Germany, Spain, and France. An increasing percentage of total cotton production is being processed by the local textile industry; larger supplies of textiles are exported. Even so, raw cotton exports probably picked up during the current marketing year because of the large 1969 crop.

While the UAR will have larger supplies of its usual farm products available for export, it must import large quantities of food. Wheat and wheat flour deficits for 1970 are likely to approach 2.5 million tons. There will be a need for close to 150,000 tons of animal fats and vegetable oils, plus small quantities of feed grains, dairy products, and tobacco.

Near the end of calendar 1969 the UAR agreed to purchase 600,000 tons of wheat and 50,000 tons of flour from Italy for delivery before June 30, 1970. Earlier contracts were signed with France for 900,000 tons of wheat. In recent years Russia and Spain have shipped wheat and flour to the UAR. Moreover, there are reports that discussions underway could lead to sizable purchases from Canada.

Aside from small amounts of tallow, tobacco, vegetable oils and miscellaneous items, the UAR has been an insignificant dollar market for U.S. agriculture during the past few years. Incomplete data for 1969 suggest U.S. trade with the UAR declined for the fourth consecutive year. The value of these shipments plunged from $137.8 million in 1966 to $7.2 million for 1968, principally because of reduced U.S. shipments under P.L. 480. Total U.S. farm imports from the UAR have also declined in recent years and amounted to only $6.1 million in 1968--all but 3 percent was accounted for by long-staple cotton.

Given a favorable political climate, the Egyptian economy will continue to grow and thus provide a larger market for selected farm commodities in the immediate future. Prospects of expanding the present small dollar market for U.S. farm products are not good; Egypt has few dollars and limited opportunity for earning more. The prevailing exchange-control system tends to conserve foreign exchange earned from hard-currency areas and to maintain balance with bilateral trade partners. (Cline J. Warren)

CYPRUS

Cyprus has just completed its first decade of independence. Cypriot agriculture during that time has made great strides. The index for total agricultural production (1957-59 = 100) stood at 209 in 1969, up 25 points from 1968. With population growing at a rate of less than 2 percent per year, the index of per capita agricultural production climbed to 185, up 95 points from 1960. Approximately 40 percent of the Cypriot population is involved in agriculture, forestry, and fishing. This has changed little in the last 10 years.

Agricultural Production

There was a vast improvement in the agricultural situation in 1969. A year earlier, the island's grain crops suffered severe damage from drought. Early and timely rainfall in December 1968 and early 1969 resulted in excellent crops of wheat and barley as well as good harvest of most other commodities. Record crops of grapes, olives and citrus were produced.

Wheat production for the 1969 season reached 85,000 tons, about 40 percent greater than in 1968. The barley crop at 105,000 tons was surpassed only by the excellent 1965 crop of 137,000 tons.

Total production of citrus for 1968/69 reached a record 177,000 tons. Of this crop, 144,000 tons went into export and 14,000 tons for processing. Oranges accounted for more than 50 percent of the total production. Production of Valencia type oranges has tripled since 1964, while the production of the Shamouti (Jaffa) variety has leveled off. There has been a continued increase in the production of grapefruit during the past few years. With the increasing acceptance of grapefruit in the European market, this trend will probably continue.

The government intends to increase livestock and meat production. This program, singled out for development during the first 5-year plan (1963-67), has met with success. The value of production rose by 33 percent. Improved slaughtering methods are being encouraged, as well as mixed farming projects, to stimulate animal raising. The government wants to increase the raising of improved dual-purpose cattle. All this is being done in the hopes of making Cypru self-sufficient in meat and of reducing outlays of foreign exchange for meat and other livestock products.

Foreign Trade

In 1968/69 the United Kingdom was Cyprus' most important citrus customer, taking almost 40 percent of the total exports. The EC countries were second with 25 percent, East European countries third with 24 percent, and other West European countries fourth with 8 percent.

Cypriot officials feel that the great est increase of the citrus market will be in East Europe where per capita consumptic is on the rise.

Despite the drought of 1968, agricultural exports contributed over 57 percent of the total value of goods exported. Citr potatoes, carobs, vine products, and carrc continued to find good markets abroad. (Michael E. Kurtzig)

IRAN

Iran's overall rate of growth has bee exceptional, averaging about 10.5 percent over the past 4 years. The gross national product at current prices was estimated at over $8 billion for the Iranian year that ended March 20, 1969. GNP per capita, whi has been rising, was about $300.

At the same time the cost of living has risen at a very low rate--less than 2 percent per year. But it has been less stable in recent years and is under increa ing pressure.

Oil production, which has risen about 95 percent over the past 5 years, slowed a little in 1967 and 1968 but accelerated in 1969. This sector of the economy has contributed importantly to the overall econom growth. Non-oil industries and constructi also have been increasing rapidly.

Agriculture, while it has not kept pace with the other sectors, has contributed. In recent years agricultural productivity has stepped up. This momentum is the result of government efforts and favorable weather. All crops contributed but most important was the sharp rise in wheat production from 1967 through 1969. Overall, farm production in 1969 was very close to the 1968 figure.

Agricultural Production

The production of wheat in 1969 was reported at 3.9 million tons, down 500,000 tons from the preceding year, but about the same as in 1967. The decrease in production was largely due to heavy rainfall during late fall and winter which delayed planting in most parts of Iran. This was followed by wheat rust that came after beneficial spring rain. About 4.6 million hectares (11.4 million acres) were harvested in 1969, down slightly from a year earlier. The area will be expanded in 1970.

The output of barley in 1969 was close to the 1.27 million tons turned out in 1968. Unfavorable weather at planting time reduced the area in barley.

Rice production increased primarily because of an expansion in acreage and better cultural practices. The 1969 crop was estimated at 1.05 million tons, slightly above the 1968 harvest.

Cotton showed a small increase in output in 1969 and was estimated at 152,000 tons, only 2,000 tons better than the 1968 crop. The increase came on an expanded area. Cotton production has been up since 1967, reflecting both good weather and success in controlling the bollworm. Iran uses about 52,000 tons of its raw cotton; the balance is exported.

In 1967 Iran produced about 71,600 tons of vegetable oil. Cottonseed is the major oilseed produced. Smaller amounts of flaxseed, sunflower seed, sesame, castor beans and others are grown but total production is only about half the country's domestic needs. A program therefore is underway to encourage farmers to produce more oilseeds, thereby increasing their earnings and saving millions of dollars in foreign exchange spent for the import of vegetable oils. In 1968 Iran imported 70,425 tons of vegetable oils.

Unfavorable weather for almonds, especially in Azerbaijan, accounts for the small almond crop of 20,000 tons in 1969. The 1968 crop amounted to 26,000 tons. Walnuts, on the other hand, had a good year; the 6,000-ton 1969 harvest slightly exceeded the 1968 crop. Pistachios, important in the Kerman area of Iran, produced a record 15,500 tons in 1968. In 1969 although conditions were not particularly unfavorable, the output dropped to 7,000 tons due to the cyclical nature of the pistachio. The overall quality of the 1969 harvest was better than in 1968.

Sugar production has steadily increased since the mid-1960's. Raw sugar at 217,000 tons in 1965, climbed to 457,000 tons in 1967 and to 582,000 tons in 1969. About 10 percent of this is cane sugar and the balance is beet. Both beet and cane production have been increasing. A government goal is to increase sugar production until Iran is self-sufficient. To accomplish this, sugar production must increase about another 100,000 tons, and then continue to keep up with population growth.

Production of dates appears to have leveled off in recent years. The 1969 harvest at 280,000 tons likely surpassed the 1968 harvest, but was not outstanding. Early spring frosts and fungus disease reduced the apricot harvest to below half the 1968 crop. Raisins also suffered from frosts and fungus, and production was only about 56 percent of the 1968 crop. The 1969 harvest of apricots was estimated at 4,000 tons and raisins, 34,000 tons.

Better pasture conditions in recent years have allowed an increase in livestock numbers. Even so, the output of meat and dairy products is not sufficient to meet growing demand. To a degree, stepped-up imports of both live animals and frozen meat are helping to solve the problem, but the shortage is still critical.

The poultry industry is expanding rapidly and price levels have been favorable for broiler production.

Roughly half the meat consumed is sheep and goat meat; the balance is beef,

buffalo and poultry. Per capita meat consumption averages about 34 pounds, but only 2 pounds is poultry meat. For comparison, Europe's per capita consumption of poultry alone is well above Iran's per capita consumption of all meat.

Agricultural Policy

Under Iran's third development plan, agriculture had an annual growth rate of about 3.4 percent. Under the fourth plan (running from 1968/69 to 1972/73) the goal is placed at a 5 percent rate. Use of increased inputs is one method being used to improve crops. During the fourth plan period, annual fertilizer usage (which amounted to about 72,000 tons at the end of the third plan) is to be doubled, irrigation increased, and new varieties promoted--especially wheat and barley. In addition, mechanization of farming will be increased by about 40 percent.

Through these developments and by various institutional means such as the encouragement of large-scale farming, agricultural development is being integrated with the country's agrarian reform program. In some areas numerous join-stock farming companies are being set up with small farmers as shareholders. In other areas, especially where new or unused land is being opened up by irrigation as in areas of the Khuzistan, large-scale farming units are being developed as agribusiness ventures.

A large research center is being developed for experimental work with new disease resistant, high-yielding varieties for a number of crops; sugar production continues to be promoted; and vegetable oil production is aimed at gaining a level of self-sufficiency. Though most oilseeds are grown in Iran, sunflower seed apparently has become the most popular in the current expansion program.

Foreign Trade

There was little change in agricultural exports from 1968. They accounted for 44 percent of all exports when petroleum is excluded, and about 7 percent of total exports. However, agricultural exports increased by almost $23 million over the prior years. Leading export items were cotton, fruits and vegetables, hides and skins, and wheat. The United States ranked second as a buyer of Iranian farm produce purchasing mostly hides and skins, nuts, fruit, and gums.

Iran's agricultural imports made up only 8.8 percent of total imports and the principal farm commodities imported were cereals and vegetables oils. The United States ranked second as supplier of Iranian imports. Farm items sold by the United States were principally wheat and vegetable oils. (H. Charles Treakle)

IRAQ

Although a fair percentage of Iraq's cropland is irrigated, crop yields, especially wheat, still fluctuate with the amount of rainfall. In the 5 years before 1968, wheat crops were poor. But in 1968, and again in 1969, wheat production totaling at or near 1,200,000 tons was more than enough to meet the domestic consumption. Virtually all crops have improved from the levels of earlier years. Preliminary reports indicate that the 1969 level of production was slightly above the 1968 outtur

Increasing oil revenues in the 1950's allowed a number of large irrigation projects to be built, but these failed to produce the anticipated early gains for the individual farmers. Land reform was just started, when administratively it was allowed to mark time. However, activities and work have gone forward in other areas. A good start has been made at growing sugarcane, a sugar factory has been built, and new varieties of cereals have been introduced. Inputs, especially the use of fertilizer, have been promoted for improving the rice crop.

Notable progress has been achieved in poultry production for both meat and eggs. With the help of the FAO and the United Nations, inoculation and dipping projects have improved livestock health. Progress has also been achieved in agricultural extension and in promoting cooperatives which will be important as the agrarian reform program progresses.

Agricultural Production

Agriculture accounted for about 26 percent of the gross national product in

1962 but has now declined to about 22 percent. After oil, farming is the most important sector of the economy and employs the greatest number of people.

Winter crops, principally wheat and barley, vary in production with the amount and the timing of rainfall in their growing area. In 1969, the timing and distribution of precipitation was favorable. Though not equaling the bumper crop of 1968, wheat was reported at 1,189,000 tons. Barley output, at 730,000 tons, was highly satisfactory.

Summer crops account for only about 7 percent of the cultivated area. Much of this cropland is irrigated, and therefore is not so dependent on precipitation. The principal summer field crops are rice, cotton, tobacco, millet and sorghum, corn, summer pulses and vegetables. Their production levels have held fairly constant for the past 5 years. Rice, however, is an exception. There has been special attention given to increasing the rice area. In 1967, the government distributed fertilizer to rice growers and now have served about a quarter of the area in rice. Also, the FAO and a U.S. private foundation have assisted in experimentation work with new varieties. Rice production responded to these efforts with sharply increased yields. The 1969 paddy rice harvest was estimated at 500,000 tons, up 50,000 over 1968.

Iraq now has a sugarcane plantation which is a going concern. The government contracted with a U.S. company to design, lay out, and carry through the development of a sugarcane plantation similar to the one it engineered for Iran. By the end of 1969 there were an estimated 2,000 Iraqis working on the project and in the sugar mill constructed as part of the undertaking. Iraq uses about 250,000 tons of refined sugar annually and the sugar mill at the Amarah sugarcane plantation will be able to refine 00,000 tons. Roughly a third of the raw sugar for this mill will be produced by the new sugarcane project. The complex is located in Amarah Liwa (province), near the village of Mujai Al Kabir and watered by the river of the same name, a branch of the Tigris.

Production of dates, Iraq's principal agricultural export, fluctuated during the 960's. In some years poor ripening weather was blamed for the smaller crop. In 1967 heavy infestation of pests caused the output to drop to 270,000 tons. Conditions were better in 1968 and the harvest was reported at 322,000 tons. This was far from a record crop, but considerably better than the 290,000 tons estimated for the 1969 harvest.

Agricultural Policy

Iraq is just beginning a new 5-year plan--1970-74--which allocated 41 percent of the funds for agriculture. Improvements have been made in the administration and implementation of agricultural projects such as the sugarcane project. Increases in irrigation and drainage are underway. Planners appear to be hedging against the country's great dependence on weather while battling salinity, the great robber of good irrigated land.

Plant breeders have joined the "green revolution" with the introduction of the new varieties of Mexican wheat and some new rice strains developed at the International Rice Research Institute in the Philippines. Other projects include a fertilizer program for rice, supervised credit, additional grain silos and storage sheds, and agricultural marketing facilities.

Foreign Trade

Petroleum accounts for roughly 90 percent of Iraq's exports. Excluding petroleum, and striking an average for the 1960's, over two-thirds of Iraq's export revenues came from agricultural products, principally from the marketing of dates, wool, cotton, hides and skins, barley, and in some years wheat. The trend, however, has been downward. Agricultural commodities which accounted for over 83 percent of the non-oil exports in 1963, had roughly a 54-percent share in 1967. Part of this decrease reflected a drop in the value of date exports and an increase in industrial exports, principally cement.

Prior to 1958 cereal exports, principally barley, exceeded date exports but they did not challenge dates as the leading export item of the 1960's. In 1967 (latest full year available) Iraq exported agricultural products valued at about $31 million and imported foods worth some $74 million.

Principal food imports were sugar, cereals, tea, vegetables oils, and fruit and vegetables.

It is trade policy to require import licenses and exchange permits. Exchange control is administered by the central bank. There are prohibited and suspended import lists which protect home production and control imports. The import program--amount of total imports allowed each year--is broken up by the Ministry of the Economy for licensing. Divisions are nondurable consumer goods, durables, and capital goods.
(H. Charles Treakle)

ISRAEL

The Israeli economy in 1969 continued its vigorous recovery with a GNP increase of approximately 10 percent. This accompanied a substantial trade deficit and a severe depletion of foreign exchange reserves. In 1968 Israel experienced a trade deficit of $440 million; in 1969 it grew to an estimated $544 million. Some measures have been adopted to ease the deficit. In recent years, inflation has been tightly controlled and labor and government have held down wage increases.

Agricultural Production

Agricultural production slipped about 1.5 percent in 1969. Following the record 1967 crop of 222,000 tons, wheat production declined to 175,000 tons the following year and to 145,000 tons in 1969. Hindering growing conditions were heavy flooding in the northern part of Israel in late December 1968 and early January 1969 and extremely dry weather in the Negev.

The barley crop for both 1968 and 1969 was pegged at 25,000 tons--less than half of the 1967 crop. The grain sorghum crop failed to match the 21,000 tons produced in 1968. Israel does not depend on the domestic production of feedgrains to fulfill its domestic needs. Almost all Israeli feedgrains are imported, mostly from the United States.

In November 1969, the government concluded a 5-year agreement covering grain shipments from the United States in 1970-74.

The Israelis are pursuing the work on high-yielding varieties of wheat and other crops. They plan to increase domestic production and reduce some import needs. The area for wheat rose from 44,500 hectares (110,000 acres) in 1959 to close to 100,000 hectares (250,000 acres) in 1969. Yields also increased. Wheat yields are, however closely tied to rainfall, especially in the extensive wheat fields in the south. New wheat varieties are undergoing intensive local selection and yields of 30-40 bushels per acre have been achieved under favorable conditions. Certain dwarf varieties were yielding an outstanding 80-90 bushels per acre, but the grain showed poor baking properties. According to present plans, the Israelis hope to develop a wheat strain which in combination with the skilled use of fertilizer and irrigation will produce around 100-120 bushels per acre. This, they hope, will produce an annual crop of close to 300,000 tons, which would meet approximately three-fourths of their domestic requirements.

Grain prospects for 1970 are not good Drought conditions in late 1969 and early 1970 have severely affected the prospects in the South, the major grain producing area.

Israel's output of cotton reached a record 35,000 tons in 1969. Heavy stocks at the end of the marketing year made approximately 15,000 tons available for export, double the movement of the previou marketing year.

A slight frost in some parts of the main citrus producing areas, unusually heavy and persistent rainfall in January and February causing severe damage to exposed areas, and an off year in the biannu production cycle of most citrus varieties caused a slight decline in the total produ tion of citrus in 1969. The main drop occurred in Shamouti which contributed 50 percent of the total production compared with 54 percent the previous year. There was no significant change in the citrus producing area. Losses of old plantations have been offset by new plantings coming into production.

The production of vegetables continue to increase, particularly potatoes, tomato

adishes, cabbages, and other green-leaved egetables. Also, there has been an increase in vegetables planted under plastic, ainly for export to Europe.

Although olive groves are traditional n the Middle East, today most vegetable il in Israel is crushed from soybeans imorted from the United States. Extract rom domestic oilseeds falls short of the omestic requirement.

gricultural Trade

Citrus continues to be the top export Israeli agriculture. Approximately 0,000 tons of fresh citrus out of a total oduction of 1.2 million tons were shipped ring the 1968/69 season. The export lue of this fresh fruit approximated $90 llion. In addition, about $30 million of ocessed citrus products were exported. her items such as avocados and strawrries are finding good markets in Europe. ny of these are air-shipped and of exptional quality when they reach the mart. In 1968/69 close to 4,000 tons of ocados were exported. Plans call for avodo production of 20,000 tons by 1980 with me 15,000 tons available for fresh export.

Israel, beginning in 1965, moved into e flower exporting business. Flowers are own in plastic houses, then picked, wrapd, and shipped almost immediately to Eupean markets.

Israel continues to increase its exrts of cotton and during 1968/69, it shipd about 8,000 tons. The most significant velopment in cotton exports during the st year was the increase in exports to st European countries. They took 39 pernt of Israeli cotton exports. The EC untries accounted for 35 percent of the tal. Other products which are exported e peanuts and high-quality seed, both getable and grain.

On the import side Israel still gets to 60 percent of its wheat from overseas, rticularly from the United States under a L. 480 program. Most of the feedgrains ntinue to be imported.

Israel's cotton imports, however, have clined and totaled 4,700 tons during this riod. The United States supplied 9 percent compared with 21 percent (1,302 tons) in 1967/68. Imports from Latin American countries increased and accounted for approximately 15 percent of total imports. Although imports from Africa declined to 1,649 tons, the share of the market remained the same as for 1967/68. Israelis consume around 100,000 tons of sugar. Around 30,000 tons are produced locally from sugarbeets; the rest is imported.

Last year almost 40,000 tons of frozen meat were imported--mostly from South America. Israel is self-sufficient in fruits, vegetables, milk products, and eggs. (Michael E. Kurtzig)

JORDAN

The Jordanian economy continues to make good progress from the disruption and losses of the June 1967 war with Israel. Heavy spending, made possible by the large contributions from other Arab governments, has sustained demand and employment. Preliminary estimates for 1969 show that overall farm output was around 60 percent larger than in 1968. The 1969 index of agricultural production stood at 249 (1957-59 = 100).

Agricultural Production

Timely and above average rainfall in the winter produced excellent 1969 crops on the East Bank.

The wheat crop increased by close to 50 percent to about 260,000 tons and the barley crop reached 85,000 tons, nearly 55 percent larger than in 1968. The West Bank produced about 70,000 tons of the wheat and 25,000 tons of the barley. While trade continues between the East and West Bank, it is nowhere near the prewar volume.

Part of Jordan's vegetable and citrus crops never materialized due to the damage done to the East Ghor Canal. Daily fighting in this area kept most farmers from their fields. Damage to the canal curtailed the much needed water for the citrus, banana, and other crops grown in this area.

The relatively abundant rains aided pastures which contributed to an increase in livestock and their products.

Agricultural Policy

There have been no siginficant changes in Jordanian agricultural policy during the past year. Jordan does not have price supports or subsidies except for wheat, mostly seed wheat. The purpose of the support price is largely to assure supply of seed wheat that may be sold to farmers. The price of locally produced tobacco is fixed by the government in conjunction with the cigarette industry.

In 1969 the Agricultural Marketing Corporation (AMC) a concern of government, farmers, and merchants, was established to regulate the export of agricultural produce, primarily vegetables and fruits, and to promote market development. Although this organization is broadly based, it has to date dealt primarily with tomatoes. During the height of the tomato harvest, the AMC arranged for the sale of about 6 tons of tomatoes daily to a processing plant in Iraq. Some 3,000 tons of tomatoes were sold to Iraq during the season.

The AMC is also negotiating with the Royal Jordanian Airlines to reduce the costs of air shipping fruits and vegetables to Europe and to the Arabian Gulf. Shipments of squash, melons, and sweet peppers to Europe during 1969 were encouraging.

Assistance is being received from USAID in the fields of wheat production, and from the United Nations in the production of tobacco and olives. Direct aid from the United States is being implemented in a project designed to develop and improve wheat farming in Jordan that will hopefully double the yields. Under consideration is a project to increase the yields of vegetables from improved varieties, better cultural practices, optimum use of irrigation water, and use of fertilizers and pesticides.

The United Nations is also involved in other projects, including 8 in agriculture and related fields. Introduction of high-yielding drought-resistant varieties, crop rotation, use of fertilizers, use of insectides and farm machinery, improvement of livestock, and the improvement of range are among the aims of these projects in the development of Jordanian agriculture in rainfed areas. The United Nations is also interested in increasing and improving the tobacco grown in Jordan with the introduction of high-yielding varieties and the establishment of curing facilities. A project begun in early 1968 aims to enhance the effectiveness of the veterinary department and to control animal diseases.

West Germany is providing insecticides and vehicles as well as technical assistance in soil fertility, veterinary services, and irrigation.

The United Kingdom is providing assistance in drilling wells and constructing irrigation systems.

Agricultural Trade

The Jordanian import pattern should remain the same as in the past years for rice, sugar, tea, coffee, and other agricultural commodities not produced in Jordan. Trade in wheat, feedgrains, and other commodities produced in Jordan depends on domestic production which in turn depends directly on growing conditions.

The United States continues to be the major supplier of wheat to Jordan. In 1970, an estimated 115,000 tons of wheat and wheat flour will be needed. Most, if not quite all, of the wheat imported by Jordan in recent years has come from the United States under the P.L. 480 program. The bulk of the flour has been supplied by United Nations Relief and Works Agency and other donors. (Michael E. Kurtzig)

LEBANON

Lebanon's agriculture was generally favored with abundant precipitation during the 1969 growing season. There were some exceptions. The apple crop suffered hail damage in May. A December dry spell caused maturing olive fruit to be more susceptable to the Olive fly (dacus olea). And heavy rains caused delays in planting vegetables, lowering production from what might have been a record crop. The heavier rainfall did provide more moisture for forage growth and livestock had a good year.

Because of a poor apple crop, agricultural production did not reach the level of the prior 2 years. To supply domestic requirements, there were the normal imports

f agricultural items; wheat, as usual, led he list. In Lebanon's predominantly mountainous countryside, expansion of agriculure is limited, but agriculture still is n important contributor to the economy. It ontributes some 12 percent of the gross ational product, and employs nearly half f the labor force as well as supplying out half of the value of all exports.

gricultural Production

Lebanese farm output in 1969 slumped out 11 percent to an index of 154 (1957-9 = 100).

Roughly two-thirds of agriculture's ontribution to Lebanon's economy is provid- by crops. Livestock, however, has been aking rapid strides in recent years. Comercial egg production has been stepped-up d fluid milk production has been increased rough modernization of some dairy farms. 1969, better than average precipitation ovided good pasture conditions which were flected in a good calf, lamb, and kid ops and a resulting increase in red meat d milk. Despite the improvements, Lebaon's livestock industry is still underdeloped and it is still a long way from eting domestic requirements. The market r broilers was erratic during 1968 and 69. Therefore, broiler production, which recent years has been edging upward, ineased only slightly. Egg production which s shown recent gains, held steady in 1969.

There have been no substantial changes the area planted to grains in the last years, except in 1969 corn acreage increas- slightly due to a government support of small hybrid seed corn program. The area der cultivation of grains is about 38 perent of the total cultivated area but it oduces only about 15 percent of the domesc cereal requirements.

Wheat production, at 50,000 tons, was ove last year's crop, but well below the oduction in any of the previous 3 years.

A large number of strains of new highelding Mexican varieties have been grown der irrigation. These were experimental r a supply of seeds. This program was rried out by a U.S. foundation working th the government on a 10-year program for eat and barley. In 1969 some 280 hectares (about 700 acres) were seeded to Mexipak and other varieties of Mexican wheat which produced 935 tons--just over 50 bushels per acre. In the fall of 1969 the Cereals Office distributed 263 tons of the best yielding strains and an estimated 3,090 acres were seeded for commercial production of Mexipak.

Lebanon farmers have taken considerable interest in a new strain of wheat called "Najah," developed locally. It is a higher yielding variety of dryland wheat that matures early. Since it is a dryland wheat it does not compete directly with Mexipak; its taller straw is not as tough as Mexipak's. Najah (which means success) was developed by Dr. W. W. Worzella of the American University of Beirut and has been tested for yield and other agronomic characteristics since 1962. In late 1968, news of this variety was released to the public and some seed was distributed to farmers.

Najah was specifically developed for Lebanese areas receiving about 16 inches of rain from November to May. However, it might well prove a good wheat for areas with similar conditions in the Middle East and around the world.

Najah is light red and hard textured. When tested in 1964-66 Najah headed about a week earlier than the local wheats--Florence Aurore and Hurani--and contained 14.6 percent protein, which also topped the local wheat's protein content.

Lebanon's barley, potato, and onion crops showed increases and were above average crops. Sugarbeets and tobacco produced at about the same level as in 1968, but many vegetables were affected because planting was delayed by spring rains.

The citrus fruit crop in Lebanon has changed little in recent years. Increases in production have been small but steady, and losses due to adverse weather have been more than offset by new bearing trees. This gradually growing production has brought increases in sales of fresh and processed fruit in both domestic and foreign markets. The 1969 crop of citrus was good in quality and size and a record crop despite hail damage in the spring. Preliminary figures listed 135,000 tons of lemons. Weather conditions were generally favorable with ample

rainfall during the growing season which was somewhat delayed.

Lebanon's main fruit crop, apples, fared very poorly. The abnormally wet spring, the hailstorms, and hot winds resulted in serious damage of both the apple and the pear crop. The pear crop is never large but production dropped 70 percent below the 1968 crop. The apple crop at 70,000 tons--was only 41 percent of the 1968 crop. This drop in apple production was responsible for the overall drop in agricultural production in 1969. The small apple and pear crop brought higher farm and consumer prices but generally apple prices in recent years have been so low that large and small growers have tended to reduce care such as pruning, thinning, spraying, and fertilizing.

Agricultural Policy

Lebanon's Ministry of Agriculture allocated over $1.7 million of its 1970 proposed budget to agriculture of which more than half is earmarked for research. This total allocation is an increase of about $325,000 over the 1969 allocation and represents about 30 percent of the total 1970 budget for agriculture.

The rising cost of obtaining seasonal workers for sugarbeet production has prompted the government to begin a 6-year program for experimental mechanization of sugarbeet production.

For the first time, a support price of almost 8 cents per kilo was set in 1969 for hybrid corn. The Government Cereals Office supplied the hybrid seed. As mentioned above, the Cereals Office also has a 10-year program to improve wheat and barley, and has been one of the countries of the Middle East that began early experimental work with high yielding varieties.

In response to a request from Lebanon for assistance, the European Community has agreed to supply 15,000 tons of wheat which will be sold in Lebanon, the proceeds of which will be used for financing development projects.

Foreign Trade

Traditionally, Lebanon has had a net trade deficit. The latest available annual trade statistics show that in 1967 exports totaled about $143 million and imports amounted to around $474 million. Lebanon exports approximately a quarter of its agricultural production and this export amounts to about half of all exports. Apples, citrus, vegetables, and poultry products are the principal farm items sold and, for the most part, these go to Lebanon's Arab neighbors.

Lebanon has had an upward trend in it marketing of fruit in recent years, but it has also had problems disposing of the lar apple crops. In 1968 the crop went beggin for markets, but the weather damage to the 1969 harvest reduced the amounts of apples marketed to just over 40 percent of the 1968 figure.

During the 1960's Lebanon's pattern o imports changed very little, but since Jun 1967 there has been some shift in trade partners. The source of poultry feed has shifted from the United States to Western Europe. There has also been increased trading with Eastern Europe. At the present, however, at least two American products enjoy preference--toasted soybean cake and tobacco.

Trade policies and the trading system are relatively free of restrictions. There are no restrictions on payments of current accounts or on transfers of capital. Leban has bilateral trade and payments agreement with several countries, mainly to promote exports of apples and citrus and to encou age the use of Lebanon's free zone facilities.

Lebanon has signed a trade and cooper tion agreement with the European Economic Community. This renewable pact includes exchange of products and coordination of techincal assistance. (H. Charles Treakle)

SYRIA

Spring rains and flooding delayed and reduced planting in some areas of Syria, resulting in shorter 1969 crops and the need to import wheat.

A good portion of the agricultural ou put, which accounts for about one-third of the country's economic production, comes from farmed drylands and is thus subject t

agaries of the weather. In good crop years yria exports wheat and barley, but in years f poor harvests, the trade in these commodities can be reversed as it was for wheat in 969.

Recent efforts have been made to reduce ese wide variations and upgrade yields. w wells and small dams have been completed d others will soon be functional. These ll provide enough water to add at least 0,000 acres to the irrigated area. Other asures include preferential credit for rmers and a wider use of fertilizer.

ricultural Production

Syria's estimated agricultural outturn 1969 was almost 6 percent less than in 68 and dropped to an index of 128 (1957- = 100).

Wheat production has had a history of regular production. In its record year, 62, wheat production reached almost 1.2 llion tons but in the fairly good years of 64 and 1965 it produced 900,000 tons. In 69, despite predictions of an excellent op early in the season, the wheat harvest 600,000 tons was disappointing and reired imports to meet the normal consumption requirements of about 800,000 tons per ar. Barley, though only a fair crop, was ported better than the 1968 crop. By November 1 about 110,000 tons of barley had en imported.

The 1969 cotton crop dropped to 142,000 ns compared with 153,000 tons in 1968. Dete this reduced outturn, a mid-October port indicated that the purchase price of livered cotton had dipped 1.5 percent be- the 1968 price.

Syrian tobacco production has held irly steady in recent years and was estited at 12,000 tons in 1969. This crop, ong with cotton, is an important export mmodity and is considered an industrial op that can be improved and expanded. Late 1969 officials of the Tobacco Monopoly viewed the results of tobacco cultivation ials and concluded arrangements for the ening the Tobacco Research Institute in akia. The Institute has already signed contract with FAO for development assisnce.

Sheep constitute the greatest part of Syrian livestock and number around 8 million. Numbers have been increased as was the stated policy of the second plan. The government wants to raise this to 10 million head and has been pushing the production of feed and fodder.

Agricultural Policy

Syria's second 5-year plan (1966-70), which was comprehensive in scope, placed considerable emphasis on agricultural development. Its 27-percent share in the public investment reflects the importance of agricultural development in sustaining general development. The second plan anticipated annual increases of 7 percent in GNP and 4.2 percent in agricultural production.

Objectives of the plan were illustrated by a listing of percentage increases desired for individual agricultural commodities. The items slated for the greatest increase were: green fodder, sugarbeets, yellow corn, citrus, peanuts, broad beans, and apricots. Ten other food crops and tobacco were listed above irrigated cotton which the planners calculated to increase only by 33 percent. Apparently cotton, though an important export crop, had to take its place behind food crops in priority.

In June 1968 the planning structure was reorganized in Syria making 10 ministers and the governor of the central bank members of a supreme planning board headed by the Prime Minister. This change replaced the ministry of planning with a state planning commission which serves as a technical secretariat of the supreme planning board. The change was made to promote better coordination and follow-up of planned programs.

Since its is very costly to bring new lands under cultivation, the supreme planning board has especially promoted efforts to increase yields for quick gains--such as increased use of fertilizer, better varieties, and improved methods, which were stressed in 1968 and 1969.

As 1970 began the Syrian cabinet approved the unified general state budget amounting to 2.78 billion Syrian pounds of

which 1.538 billion is allocated for investment in development expenditures. Of the investment expenses, agriculture and agrarian reform were allocated 529 million or 37.8 percent of the total. Besides this, agriculture will benefit from many other development expenditures.

There will be almost a doubling of the area under irrigation when the Euphrates Dam, now under construction, and the related irrigation scheme is completed.

From the Kuwait Fund for Arab Economic Development, a loan of $8.4 million has been negotiated for the construction of grain silos and warehouses which should be completed by the end of 1972. The first stage of the plan entails construction of grain-storage facilities in Damascus and Homs for some 112,000 tons to be completed by the end of 1970. In the second stage (work to be complete by the end of 1971) silos will be built in seven other major towns.

Syria's work with new varieties of wheat and other crops and assistance extended by the FAO and the United Nations Development Fund will help to give agriculture an additional boost. Also, the government has already invested $50 million in developing the Ghab Valley and expects to allocate about $13 million more in the next several years for field drainage, irrigation networks, machinery, breeding stock, and market facilities.

Foreign Trade

Preliminary figures released by Syria showed that exports for 1968 amounted to some $177 million and imports rose to $314 million, leaving a trade deficit of $137. This was an increase over 1967 by 14 percent for exports and 18 percent for imports. Exports rose for trade with Arab countries and the European Community and fell by 11 percent for the East European markets. Imports, however, rose from both Arab and East European countries over 1967 imports.

In 1968 agricultural items contributed just over two-thirds of the total value of all exports. These items were principally raw cotton, accounting for about 37 percent, and livestock supplying some 16 percent of the value. Smaller amounts of fruit and vegetables, wool, barley, wheat, and tobacco represent most of the other items sold.

Syria's foreign trading system is based on two different exchange markets. There is the official market that applies to specified items, including such agricultural items as wheat, barley, and cotton. The other is a parallel or free (bu managed) market that applies to the remaining items not under monopoly listing, or not restricted by prohibition or suspension.

Almost half of Syria's foreign trade is nationalized and is carried on by nine government organizations which have monop power. For 1968, these organizations handled about 43 percent of all imports and 52 percent of all exports.

Also complicating free trade with Syria have been special taxes. Where import licenses are required (except of certain items from Arab countries in accorda with the Arab Common Market Agreement) th is a 2-percent license tax. There are si other separate taxes collected by customs officials on imported items. All exports of agricultural commodities except cotton are taxed at a rate of 10 percent ad valorem. Cotton exports are taxed at an ad valorem rate of 12.5 percent.

Syria maintains bilateral payments agreements with 11 countries but the percentages of total trade on these agreement dropped in 1968 to about a quarter of the export and imports. After the June 1967 war, restrictions on imports were tightene to guarantee the purchase of essentials. In February 1969 these restrictions were terminated and exchange licenses have bee dropped for free market trade, but kept when purchases are made through the offici market. (H. Charles Treakle)

TURKEY

Agricultural Production

For the second consecutive year, Turk had a disappointing wheat crop. This, cou pled with lower production of oilseeds, co ton, nuts, deciduous fruit, citrus, and a drastically reduced olive crop, contribute to a drop of 4 percent in agricultural out put in 1969. Slight increases in producti of other grains, vegetables, pulses, and livestock products were not enough to offs the general downtrend.

A cool spring and a sudden dry spell in te May caused a drastic reduction from e expected wheat harvest. The crop of 3 million tons was 100,000 tons below the 68 crop and well below the record 1967 op of 9 million tons. Mexican wheat pro- ction was affected less severely than her wheat. After heavy flooding in the ana area early in January 1969, the crop covered well. Approximately 2.1 million ns of Mexican wheat were harvested. It s produced on roughly 12 percent of har- sted wheat acreage.

Barley production was up by 100,000 ns over 1968 at 3.6 million tons while rn production was up as well by 100,000 ns.

The outlook for the 1970 wheat harvest only fair because of unusual weather. The ll rains which usually begin in late Sep- mber did not begin until mid-November. en the rains began, there was heavy flood- g in the Aegean and the Cukurova regions. e delayed rains also caused a slowdown in anting in the Anatolian Plateau and in me cases winter wheat was not planted be- re cold weather. Flooding in the Aegean d the Cukurova areas prevented the plant- g of some of the Mexican wheat and this ea may be devoted to cotton for the coming ar. The total Mexican wheat planting for 70 will likely be the same as 1969--ap- oaching 1.5 million acres. If another or wheat crop materializes in 1970, there ould again be heavy imports of wheat.

Cotton production in 1968 was a record 5,000 tons. The current estimate puts the 69 area and production at 10 and 11 per- nt, respectively, below the 1968 level. oduction in the Aegean area was reduced by most 18 percent from 170,000 tons harvest- in 1968.

The 1969 tobacco area is estimated to 229,000 hectares (566,000 acres) down 17 rcent from 1968. This drop was mainly on ttom lands which were planted to other ops. The sharpest drop in tobacco produc- on was reported in the Black Sea area. tal production for 1969 was estimated at 5,000 tons, down 10 percent from 1968 and percent from the very high 1967 crop.

Although 1969 was an off year for fil- rts a crop of 100,000 tons was produced; 1969 was also an "off" year for almonds, walnuts, and pistachios.

In 1968 olive production reached a record 775,000 tons, producing 126,000 tons of pressed olive oil; 1969 was an off year and the production of olives declined precipitously to 350,000 tons. Because of prevailing dry weather the 1969 oil crop is estimated at 40,000 to 45,000 tons. Production of sunflowerseed was up by 50,000 tons in 1969 to a record 280,000 tons.

Recent reports indicate that Turkey is now self-sufficient in vegetable oils. Ten years ago Turkey was importing about one-third of its total vegetable oil requirement under P.L. 480 programs. Total production of vegetable oils climbed from 106,500 tons in 1959/60 to 304,200 tons in 1968/69. This drive for expanded vegetable oil production has been supported by the government and by union groups.

The livestock situation has been critical in eastern Turkey where, because of a long dry period, a significant feed shortage developed. Livestock numbers for the country continue to increase; they were up by 1.6 percent in 1969 and totaled 76.2 million head. But the major increase had shifted to cattle. This increase puts a further strain on the already meager grazing area of Turkey and on the critical feed situation. Slaughter of animals is also increasing but the carcass weights are declining. Exports of livestock and meat are up but still quite low. Per capita consumption of red meats is estimated at 14 kilograms per year.

Agricultural Policy

The general objectives of the agricultural policy of Turkey continue to be to attain self-sufficiency in all crops, to close the foreign exchange deficit by maximizing exports of traditional export crops, and to promote markets for new agricultural commodities. In the attempt to increase exports the Turkish government is giving special emphasis to fresh fruits and vegetables. Turkey, while trying to support growers, grants premiums to exporters to make their products more competitive. Russia continues to be a good market for Turkish raisins whereas other East European countries are taking more of Turkey's

tobacco. Both raisins and tobacco are in large supply in Turkey.

Foreign Trade

Exports of agricultural products except cotton showed increases in the first 9 months of the year. Greater exports of filberts, tobacco, and livestock (and products) were responsible for a good part of the increase. The substantial increase for tobacco exports (up by 15.8 percent during the first 9 months of 1969) was caused by delayed shipments to the United States due to the U.S. dock strike in late 1968 and early 1969.

The reduced 1968 wheat crop required Turkey to import wheat. In 1968, 553,000 tons were imported; 300,000 tons came under the P.L. 480 program. The poorer 1969 crop necessitated arrangements for half a million tons of wheat under the P.L. 48 program and the total wheat imports shoul reach close to 850,000 tons before the ma 1970 harvest. These large shipments of wheat will again increase the value of th Turkish agricultural imports to $50-60 mi lion and will increase the U.S. share of Turkish agricultural imports. (Michael E Kurtzig)

APPENDIX TABLES

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Table 1.--West Asia and Africa: Indices of agricultural production, total and per capita, by country, 1965-69

(1957-59 = 100)

Region and country	Total					Per capita				
	1965	1966	1967	1968	1969 1/	1965	1966	1967	1968	1969 1/
West Asia:										
Cyprus	175	148	207	180	209	164	137	188	161	185
Iran	116	121	133	144	140	96	98	103	109	103
Iraq	108	104	105	122	120	86	81	81	92	89
Israel	176	167	195	203	201	137	127	146	148	143
Jordan	204	132	228	157	249	167	104	174	116	179
Lebanon	159	154	200	173	154	130	123	157	132	115
Syria	156	119	133	136	128	127	94	103	102	93
Turkey	117	130	135	137	132	98	106	107	106	100
Total West Asia	122	127	136	141	137	101	102	107	108	102
Africa:										
Algeria	94	68	83	96	84	82	58	69	77	65
Angola	131	139	142	140	146	119	124	125	122	125
Burundi	109	112	115	118	119	95	96	96	97	96
Cameroon	128	130	133	138	143	110	109	109	111	113
Congo (Kinshasa)	76	78	83	87	90	65	65	67	69	70
Dahomey	120	127	126	134	141	103	107	104	109	112
Ethiopia	116	117	125	127	131	103	102	106	106	107
Ghana	136	142	147	135	143	113	115	116	104	107
Guinea	100	97	102	110	114	82	77	79	83	83
Ivory Coast	168	153	188	177	191	141	125	150	137	144
Kenya	137	151	156	163	165	112	120	120	122	117
Liberia	109	108	118	119	121	98	95	102	101	101
Malagasy Republic	119	122	128	122	112	102	102	105	98	88
Malawi	131	144	151	134	132	111	119	121	105	101
Mali	104	113	120	111	130	91	97	101	92	106
Morocco	122	100	114	162	135	101	80	89	122	99
Niger	133	139	161	125	162	110	112	127	96	121
Nigeria	119	126	116	115	116	94	101	91	88	86
Rhodesia	143	153	143	107	139	115	120	108	78	99
Rwanda	90	99	119	112	116	73	78	90	83	83
Senegal	146	121	146	116	138	124	100	118	92	106
Sierra Leone	117	115	115	120	123	108	104	103	106	107
South Africa, Rep. of	116	124	154	132	132	98	103	125	104	102
Sudan	131	138	152	144	156	108	110	118	109	114
Tanzania	124	140	135	140	139	104	115	108	109	106
Togo	124	120	135	136	134	103	97	106	104	100
Tunisia	99	78	82	93	78	84	65	67	74	60
Uganda	123	123	124	132	130	103	101	99	103	99
United Arab Republic	118	113	114	115	122	99	92	91	89	93
Upper Volta	120	106	116	113	119	104	90	97	93	96
Zambia	153	190	221	170	166	125	151	170	127	120
Total Africa	119	119	126	124	127	100	98	101	97	97

1/ Based on preliminary data.

Table 2.--West Asia and Africa: Indices of food production, total and per capita, by country, 1965-69

(1957-59 = 100)

Region and country	Total					Per capita				
	1965	1966	1967	1968	1969 1/	1965	1966	1967	1968	1969 1/
st Asia:										
Cyprus	173	149	209	181	211	162	138	190	162	187
Iran	113	119	132	142	137	94	96	102	107	100
Iraq	107	104	104	121	119	85	81	80	91	88
Israel	169	158	184	191	187	132	120	138	139	133
Jordan	204	132	228	157	249	167	104	174	116	179
Lebanon	159	154	202	173	152	130	123	158	132	114
Syria	145	107	131	124	117	118	85	101	93	85
Turkey	114	126	130	132	128	95	103	103	102	97
Total West Asia	118	123	133	137	134	98	99	104	105	100
rica:										
Algeria	94	66	83	96	84	82	56	69	77	65
Angola	114	116	119	121	124	103	104	105	105	107
Burundi	113	117	118	121	124	98	100	99	99	100
Cameroon	118	121	124	130	134	102	102	102	105	106
Congo (Kinshasa)	78	79	84	88	90	66	66	68	70	70
Dahomey	119	125	124	133	140	103	106	103	108	111
Ethiopia	116	116	124	126	130	103	101	105	105	106
Ghana	136	142	147	135	142	113	115	116	104	106
Guinea	101	100	103	111	116	83	80	80	84	85
Ivory Coast	153	171	179	181	190	129	140	143	140	143
Kenya	123	136	154	154	150	100	108	119	115	106
Liberia	104	95	98	97	98	93	84	85	82	82
Malagasy Republic	119	125	127	124	113	102	105	104	100	89
Malawi	128	226	291	207	228	108	186	233	162	174
Mali	101	109	114	103	121	88	94	96	85	98
Morocco	123	101	115	164	136	101	81	89	124	99
Niger	133	139	161	125	162	110	112	127	96	121
Nigeria	119	125	116	114	115	94	101	91	87	85
Rhodesia	132	142	141	105	154	106	111	106	77	109
Rwanda	90	99	119	112	116	73	78	90	83	83
Senegal	146	121	146	115	137	124	100	118	91	106
Sierra Leone	116	116	115	120	123	107	105	103	106	107
South Africa, Rep. of	115	127	161	133	133	98	105	130	105	103
Sudan	122	122	140	120	132	100	98	109	91	97
Tanzania	119	128	130	133	134	100	105	104	104	102
Togo	119	124	130	132	135	99	100	103	101	101
Tunisia	99	77	82	92	77	84	64	67	73	60
Uganda	114	115	115	116	117	96	94	92	91	89
United Arab Republic	117	117	120	121	124	98	96	96	94	94
Upper Volta	120	106	115	110	115	104	90	96	90	93
Zambia	133	187	251	170	170	109	149	193	127	123
Total Africa	116	118	125	122	124	97	97	100	96	95

1/ Based on preliminary data.

Table 3.--West Asia: Production of principal agricultural products, by country, averages 1957-59 and 1960-64, annual 1966-69

Country and year 1/	Wheat	Barley	Corn	Rice, paddy	Beans and peas	Grapes	Citrus fruit	Dates	Cotton	Cotton-seed	Tobacco	Sugar-beets	Milk	Eggs	Meat
	1,000 metric tons														
Cyprus															
Average:															
1957-59	69	62	--	--	5	86	53	--	--	1	1	--	n.a.	n.a.	n.a.
1960-64	53	70	--	--	6	100	84	--	--	1	1	--	28	5	10
1966	56	69	--	--	4	140	128	--	--	1	1	--	48	5	20
1967	97	87	--	--	5	168	147	--	--	1	1	--	51	6	20
1968	60	50	--	--	5	175	169	--	--	--	1	--	52	6	18
1969	85	105	--	--	5	182	185	--	--	--	1	--	53	6	26
Iran															
Average:															
1957-59	2,831	983	20	477	140	259	2/ 45	282	71	157	12	747	1,592	33	157
1960-64	2,743	961	18	728	134	259	2/ 41	312	109	240	12	960	1,490	35	191
1966	3,190	1,000	21	875	120	265	2/ 45	290	113	230	22	2,272	1,700	42	210
1967	4,000	1,020	30	954	140	250	2/ 48	280	115	233	22	2,830	1,900	44	224
1968	4,400	1,270	35	1,000	150	260	2/ 50	280	150	305	20	3,300	1,900	46	228
1969	3,900	1,200	38	1,046	140	260	2/ 52	280	152	331	23	3,600	1,800	48	236
Iraq															
Average:															
1957-59	814	994	4	287	51	n.a.	n.a.	301	11	25	7	n.a.	1,187	10	89
1960-64	728	908	4	329	42	n.a.	n.a.	318	8	18	9	n.a.	1,245	10	102
1966	700	700	5	370	55	n.a.	n.a.	400	7	14	11	26	1,250	12	110
1967	750	700	5	420	50	n.a.	n.a.	250	10	19	13	25	1,275	13	100
1968	1,361	750	6	450	60	n.a.	n.a.	320	10	19	14	26	1,275	14	110
1969	1,189	730	6	500	55	n.a.	n.a.	290	10	22	13	27	1,300	15	110
Israel															
Average:															
1957-59	73	64	27	--	5	50	3/528	--	5	11	1	90	229	47	45
1960-64	68	54	8	--	3	66	3/658	--	15	31	1	239	375	71	81
1966	101	21	3	--	8	76	3/870	--	25	40	2	282	394	73	96
1967	222	56	3	--	11	82	3/1,046	--	29	48	2	239	429	84	105
1968	175	25	3	--	10	72	3/1,227	--	33	53	2	248	443	75	114
1969	145	25	3	--	10	76	3/1,161	--	35	57	2	190	455	70	121

Average:															
1957-59	130	41	1	--	5	48	4	1	--	--	--	--	n.a.	n.a.	n.a.
1960-64	133	46	1	--	5	67	23	1	--	--	1	--	42	4	12
1966	101	23	1	--	7	62	40	1	--	--	2	--	48	5	13
1967	226	80	1	--	7	28	49	1	--	--	2	--	47	5	11
1968	173	55	2	--	7	25	50	--	--	--	2	--	47	5	11
1969	260	85	2	--	7	40	63	--	--	--	2	--	48	5	12
Lebanon															
Average:															
1957-59	38	6	4	--	3	40	96	--	--	--	4	5	4/ 63	3	21
1960-74	38	8	2	--	3	35	137	--	--	--	4	34	82	8	33
1966	60	10	2	--	5	31	183	--	--	--	6	113	99	21	30
1967	70	12	2	--	4	37	195	--	--	--	6	125	109	22	33
1968	45	5	1	--	2	35	199	--	--	--	7	120	113	20	30
1969	50	12	1	--	4	34	200	--	--	--	7	120	118	21	35
Syria															
Average:															
1957-59	677	350	13	2	19	177	3	--	100	226	7	62	305	7	97
1960-64	728	472	11	1	27	232	5	--	143	328	7	106	210	8	86
1966	400	150	7	1	30	235	7	--	140	288	9	140	225	10	100
1967	800	400	9	1	25	240	8	--	126	256	12	150	230	11	105
1968	600	300	9	1	22	230	8	--	153	311	12	175	230	11	100
1969	600	350	9	1	25	230	8	--	142	288	12	200	230	11	100
Turkey															
Average:															
1957-59	6,486	3,110	883	164	289	2,452	223	--	170	304	121	2,651	3,664	62	361
1960-64	6,979	3,219	979	160	282	2,666	328	--	243	404	130	3,596	3,854	67	437
1966	8,200	3,500	1,000	208	275	2,800	445	--	382	611	164	4,422	4,322	74	470
1967	9,000	3,800	1,080	200	288	3,128	541	--	396	634	183	5,253	4,426	77	455
1968	8,400	3,500	1,000	173	293	2,900	581	--	435	700	162	4,716	4,451	82	469
1969	8,300	3,600	1,100	203	290	3,180	574	--	387	649	146	3,565	4,500	100	485
Total															
Average:															
1957-59	11,118	5,610	952	930	517	3,112	952	584	357	724	153	3,555	7,040	162	770
1960-64	11,470	5,738	1,023	1,218	502	3,425	1,276	631	518	1,022	165	4,935	7,326	208	952
1966	12,808	5,473	1,039	1,454	504	3,609	1,718	691	667	1,184	217	7,255	8,086	242	1,049
1967	15,165	6,155	1,130	1,575	530	3,933	2,034	531	676	1,191	241	8,622	8,467	262	1,053
1968	15,214	5,925	1,056	1,624	549	3,697	2,284	600	781	1,388	220	8,585	8,511	259	1,080
1969	14,529	6,107	1,159	1,750	536	4,002	2,243	570	726	1,347	206	7,702	8,504	276	1,125

1/ Data for 1969 are preliminary. 2/ Oranges and tangerines only. 3/ Oranges, lemons, and grapefruit. 4/ 1959 only.
-- = None or negligible. n.a. = Not available.

Table 4.--Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69

Country and year	Wheat	Corn	Sorghum and millet	Rice, paddy	Cassava	Other root crops 1/	Citrus	Bananas and plantains	Sugar, raw	Peanuts	Cotton-seed	Tobacco	Coffee 2/	Cocoa beans 2/	Cotton
	1,000 metric tons														
Algeria															
Average:															
1957-59	1,198	8	--	7	--	249	345	--	--	--	--	15	--	--	--
1960-64	1,281	8	--	6	--	233	405	--	--	--	--	8	--	--	--
1967	1,266	6	--	6	--	204	400	--	--	--	--	13	--	--	--
1968	1,534	7	--	7	--	272	430	--	--	--	--	14	--	--	--
1969	1,250	6	--	6	--	275	440	--	--	--	--	14	--	--	--
Angola															
Average:															
1957-59	11	445	67	28	1,208	114	52	192	58	32	17	2	91	--	8
1960-64	15	420	67	27	1,279	134	69	193	65	29	12	3	162	--	5
1967	27	380	70	33	1,525	176	78	213	67	32	22	6	204	--	9
1968	27	407	75	33	1,545	172	80	213	68	32	30	7	186	--	15
1969	28	420	77	33	1,590	179	81	220	69	32	40	7	198	--	20
Burundi															
Average:															
1957-59	5	107	83	3	1,137	722	--	954	--	2	5	--	19	--	2
1960-64	6	97	107	3	863	680	--	1,135	--	2	5	--	15	--	3
1967	8	116	160	4	932	884	--	1,310	--	4	6	--	19	--	3
1968	9	118	160	3	930	895	--	1,325	--	4	6	--	17	--	3
1969	9	120	165	4	935	908	--	1,350	--	4	6	--	15	--	3
Cameroon															
Average:															
1957-59	--	168	351	11	759	837	--	660	--	68	15	2	32	63	7
1960-64	--	209	344	11	790	867	--	683	--	108	28	2	49	80	13
1967	--	275	500	13	847	930	--	650	--	126	35	4	66	92	17
1968	--	280	500	14	855	955	--	650	--	130	44	4	66	100	22
1969	--	285	510	14	870	975	--	665	--	135	49	4	66	105	24
Congo (Kinshasa)															
Average:															
1957-59	3	328	54	172	7,522	331	--	1,687	26	173	101	--	53	5	50
1960-64	2	268	41	66	6,760	294	--	1,380	35	132	45	--	59	5	22
1967	2	250	45	60	7,000	326	--	1,550	45	113	24	--	60	5	9
1968	3	255	47	70	7,200	338	--	1,600	45	115	35	--	60	5	15
1969	3	270	50	80	7,250	343	--	1,650	45	118	40	--	64	5	20

1967	--	250	78	2	1,120	604	--	--	--	27	8	1	1	--	4
1968	--	260	80	2	1,142	616	--	--	--	27	8	1	1	--	4
1969	--	265	82	2	1,165	631	--	--	--	27	8	1	1	--	4
Ethiopia															
Average:															
1957-59	220	631	917	--	--	44	--	29	32	26	4	--	3/ 56	--	2
1960-64	263	684	1,066	--	--	53	--	37	51	29	6	--	3/ 70	--	3
1967	300	780	1,230	--	--	70	--	50	74	23	18	--	3/ 83	--	8
1968	310	800	1,250	--	--	70	--	50	67	25	18	--	3/ 85	--	8
1969	320	850	1,300	--	--	85	--	55	66	25	22	--	3/ 83	--	10
Ghana															
Average:															
1957-59	--	214	205	28	675	2,099	33	1,731	--	39	--	1	1	264	--
1960-64	--	231	183	34	1,035	2,379	38	2,035	--	43	--	2	3	458	--
1967	--	343	191	42	1,176	2,711	42	2,344	--	42	--	1	6	422	--
1968	--	301	156	65	914	2,777	43	2,300	--	43	--	1	5	339	--
1969	--	295	157	45	940	2,815	44	2,355	--	44	--	1	6	400	--
Guinea															
Average:															
1957-59	--	124	70	308	379	85	54	59	--	25	--	--	11	--	--
1960-64	--	133	62	316	418	52	29	57	--	20	--	--	12	--	--
1967	--	140	70	331	420	87	21	50	--	23	--	--	10	--	--
1968	--	150	70	346	450	89	22	75	--	19	--	--	11	--	--
1969	--	160	70	368	470	90	22	80	--	18	--	--	10	--	--
Ivory Coast															
Average:															
1957-59	--	113	55	122	373	1,338	--	324	--	24	3	2	135	54	2
1960-64	--	138	46	199	475	1,373	--	732	--	24	4	2	191	105	2
1967	--	224	49	347	520	1,533	--	807	--	30	22	3	270	147	13
1968	--	206	47	365	530	1,572	--	809	--	32	28	4	204	144	17
1969	--	250	51	365	540	1,605	--	765	--	32	24	4	240	160	14
Kenya															
Average:															
1957-59	112	1,101	343	6	--	47	20	--	30	2	6	--	25	--	3
1960-64	117	1,332	324	17	--	53	30	--	40	4	6	1	38	--	3
1967	243	1,633	380	23	--	60	40	--	64	11	11	--	39	--	5
1968	226	1,600	350	25	--	50	45	--	76	13	7	--	48	--	4
1969	210	1,400	325	27	--	60	50	--	125	13	8	--	50	--	4

-- Continued

Table 4.--Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69--Continued

Country and year	Wheat	Corn	Sorghum and millet	Rice, paddy	Cassava	Other root crops 1/	Citrus	Bananas and plantains	Sugar, raw	Peanuts	Cotton-seed	Tobacco	Coffee 2/	Cocoa beans 2/	Cotton
	1,000 metric tons														
Liberia															
Average:															
1957-59	--	11	--	176	207	21	6	76	--	3	--	--	1	1	--
1960-64	--	11	--	155	228	23	5	77	--	3	--	--	2	1	--
1967	--	11	--	152	225	23	5	79	--	2	--	--	4	2	--
1968	--	10	--	152	230	25	6	81	--	2	--	--	4	2	--
1969	--	11	--	153	233	25	6	82	--	2	--	--	3	2	--
Malagasy Republic															
Average:															
1957-59	--	69	--	1,113	670	326	--	158	59	32	1	4	53	--	1
1960-64	--	83	--	1,242	880	362	--	134	91	30	2	5	55	--	1
1967	--	90	--	1,464	900	450	--	170	106	48	6	5	66	--	3
1968	--	90	--	1,400	910	460	--	165	108	35	6	4	54	--	3
1969	--	90	--	1,150	940	490	--	165	104	35	6	5	50	--	3
Malawi 4/															
Average:															
1957-59	--	7	--	5	5/177	--	--	--	--	17	6	17	--	--	3
1960-64	--	31	--	6	5/147	--	--	--	--	34	9	16	--	--	5
1967	--	90	--	4	5/140	--	--	--	16	67	6	16	--	--	3
1968	--	83	--	2	5/142	--	--	--	19	23	10	15	--	--	6
1969	--	64	--	4	5/143	--	--	--	25	40	12	12	--	--	6
Mali															
Average:															
1957-59	--	56	689	179	180	60	--	--	--	96	5	--	--	--	2
1960-64	--	75	772	179	162	57	--	--	--	118	13	--	--	--	6
1967	--	66	830	172	150	61	--	--	--	119	28	--	--	--	14
1968	--	60	750	150	150	62	--	--	--	100	34	--	--	--	17
1969	--	70	875	190	150	63	--	--	--	120	42	--	--	--	21
Morocco															
Average:															
1957-59	977	327	68	23	--	122	401	--	--	--	4	2	--	--	2
1960-64	1,068	305	75	16	--	166	516	--	--	--	9	2	--	--	4
1967	1,090	255	54	27	--	205	795	--	--	--	11	2	--	--	5
1968	2,411	240	66	45	--	275	738	--	--	--	13	2	--	--	6
1969	1,613	336	77	55	--	250	852	--	--	--	12	2	--	--	6

1967	--	3	1,350	18	170	--	--	--	--	298	4	--	--	--	2
1968	1	2	948	16	198	--	--	--	--	264	5	--	--	--	2
1969	1	3	1,400	20	200	--	--	--	--	250	5	--	--	--	2
Nigeria															
Average:															
1957-59	--	1,032	3,000	332	8,283	10,577	--	1,550	--	1,070	78	11	--	122	39
1960-64	--	1,080	3,452	357	9,838	11,372	--	1,649	--	1,312	95	12	--	218	47
1967	--	1,219	3,556	391	8,331	11,685	--	1,321	30	1,258	55	11	--	239	27
1968	--	1,219	3,455	376	8,128	11,481	--	1,219	34	1,375	122	12	--	195	60
1969	--	1,219	3,556	387	8,128	11,278	--	1,270	36	1,500	127	11	--	218	63
Rhodesia															
Average:															
1957-59	1	617	208	--	54	19	--	--	8	104	--	70	--	--	--
1960-64	2	768	245	--	44	22	--	--	93	125	3	100	--	--	1
1967	16	1,000	279	--	42	21	--	--	136	77	35	93	--	--	17
1968	23	500	250	--	44	20	--	--	120	35	88	60	--	--	45
1969	27	1,100	275	--	45	22	--	--	136	122	90	62	--	--	45
Rwanda															
Average:															
1957-59	2	52	152	--	282	605	--	1,029	--	3	--	--	14	--	--
1960-64	1	48	138	--	120	509	--	1,093	--	3	--	--	9	--	--
1967	2	53	145	--	230	467	--	1,560	--	16	--	--	11	--	--
1968	2	35	123	--	233	447	--	1,616	--	10	--	--	12	--	--
1969	2	45	135	--	240	465	--	1,670	--	10	--	--	9	--	--
Senegal															
Average:															
1957-59	--	29	336	68	165	26	2	--	--	843	--	--	--	--	--
1960-64	--	31	447	91	155	30	2	--	--	954	--	--	--	--	--
1967	--	86	655	138	239	15	1	--	--	1,005	3	--	--	--	1
1968	--	20	425	90	230	14	3	--	--	813	6	--	--	--	3
1969	--	45	650	140	250	18	3	--	--	885	8	--	--	--	4
Sierra Leone															
Average:															
1957-59	--	14	23	316	424	54	81	139	--	25	--	--	4	3	--
1960-64	--	10	26	399	441	55	87	151	--	22	--	--	4	4	--
1967	--	10	30	400	476	60	97	167	--	20	--	--	5	5	--
1968	--	11	30	410	480	61	100	169	--	21	--	--	6	4	--
1969	--	12	31	412	478	61	101	171	--	21	--	--	5	3	--

--Continued

Table 4.--Africa: Production of selected agricultural commodities, by country, averages 1957-59 and 1960-64, annual 1967-69--Continued

Country and year	Wheat	Corn	Sorghum and millet	Rice, paddy	Cassava	Other root crops 1/	Citrus	Bananas and plantains	Sugar, raw	Peanuts	Cotton-seed	Tobacco	Coffee 2/	Cocoa beans 2/	Cotton
	1,000 metric tons														
South Africa, Republic of															
Average:															
1957-59	714	3,979	227	--	--	345	331	69	947	168	14	30	--	--	7
1960-64	863	5,106	260	--	--	415	437	41	1,079	223	17	27	--	--	8
1967	1,089	9,762	844	--	--	599	530	52	1,823	423	31	27	--	--	15
1968	1,272	5,316	207	--	--	626	520	54	1,505	217	44	38	--	--	22
1969	1,320	4,953	232	--	--	585	517	50	1,583	344	40	38	--	--	22
Sudan															
Average:															
1957-59	27	45	1,385	--	92	2	6	--	--	125	194	--	--	--	101
1960-64	31	30	1,585	--	115	4	9	--	--	232	289	--	--	--	147
1967	93	50	2,240	--	130	6	14	--	--	300	334	--	--	--	193
1968	95	52	1,150	--	132	6	14	--	--	250	357	--	--	--	229
1969	100	50	1,360	--	140	6	20	--	--	300	418	--	--	--	240
Tanzania															
Average:															
1957-59	13	537	978	83	1,000	263	17	782	23	34	70	3	22	--	33
1960-64	13	566	1,018	105	1,020	280	95	807	38	28	87	3	30	--	41
1967	35	700	1,145	115	1,120	319	110	870	82	11	141	8	44	--	69
1968	37	710	1,150	120	1,125	325	115	875	86	11	105	10	55	--	51
1969	37	715	1,155	125	1,130	332	120	885	91	12	144	10	48	--	71
Togo															
Average:															
1957-59	--	71	110	11	333	313	--	--	--	10	5	--	8	8	2
1960-64	--	75	87	12	358	380	--	--	--	11	7	--	11	13	3
1967	--	76	90	20	410	436	--	--	--	18	8	--	14	17	4
1968	--	70	90	20	410	436	--	--	--	18	5	--	15	19	3
1969	--	72	92	21	420	446	--	--	--	18	5	--	10	20	3
Tunisia															
Average:															
1957-59	514	4	4	--	--	32	81	--	--	--	--	2	--	--	--
1960-64	435	3	3	--	--	46	87	--	--	--	--	1	--	--	--
1967	282	1	2	--	--	79	77	--	--	--	--	2	--	--	--

1960-64	--	292	669	--	112	967	--	3,152	115	169	127	2	146	--	63
1967	--	310	700	--	120	980	--	3,270	150	200	131	4	162	--	64
1968	--	320	710	--	125	980	--	3,280	157	172	153	5	189	--	76
1969	--	325	710	--	125	985	--	3,300	159	172	153	5	165	--	76
United Arab Republic:															
Average:															
1957-59	1,441	1,584	580	1,396	--	350	--	55	--	33	826	--	--	--	436
1960-64	1,504	1,823	672	1,784	--	472	--	59	--	45	840	--	--	--	444
1967	1,500	2,300	815	2,300	--	526	--	65	--	33	758	--	--	--	436
1968	1,518	2,300	818	2,350	--	533	--	68	--	33	758	--	--	--	436
1969	1,518	2,350	825	2,440	--	538	--	70	--	36	956	--	--	--	511
Upper Volta															
Average:															
1957-59	--	131	881	23	29	48	--	--	--	46	4	--	--	--	2
1960-64	--	148	913	23	30	49	--	--	--	114	6	--	--	--	3
1967	--	150	950	35	30	48	--	--	--	94	11	--	--	--	6
1968	--	120	900	35	30	48	--	--	--	95	21	--	--	--	11
1969	--	145	940	36	31	48	--	--	--	95	26	--	--	--	14
Zambia 4/															
Average:															
1957-59	1	130	--	--	5/182	3	--	--	--	8	--	4	--	--	--
1960-64	1	156	--	--	5/150	3	--	--	--	16	--	9	--	--	--
1967	1	378	--	--	5/143	2	--	--	22	21	2	5	--	--	1
1968	1	245	--	--	5/145	2	--	--	22	7	2	7	--	--	1
1969	1	227	--	--	5/145	3	--	--	30	13	4	6	--	--	2
Total 6/															
Average:															
1957-59	5,240	12,295	12,358	4,417	25,128	20,463	1,429	12,402	1,272	3,341	1,506	150	624	520	771
1960-64	5,603	14,379	13,850	5,059	26,661	21,893	1,809	13,415	1,607	4,042	1,617	196	857	884	827
1967	5,954	21,007	16,463	6,097	26,396	23,567	2,211	14,528	2,615	4,166	1,710	201	1,064	929	928
1968	7,852	15,789	13,809	6,096	26,278	23,682	2,194	14,549	2,307	3,640	1,905	162	1,018	808	1,060
1969	6,789	16,155	15,102	6,077	26,558	23,659	2,328	14,803	2,469	4,134	2,245	185	1,023	913	1,188

1/ Yams, cocoyams, sweetpotatoes, and white potatoes.
2/ Data are for the marketing year beginning in the year shown.
3/ Exportable production
4/ Commercial production only unless specified otherwise.
5/ Total production.
6/ Total of listed countries. Includes commercial production only for all crops except cassava in Malawi and Zambia.
-- = None or negligible.

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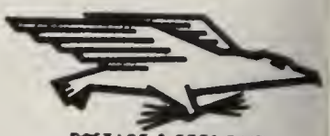

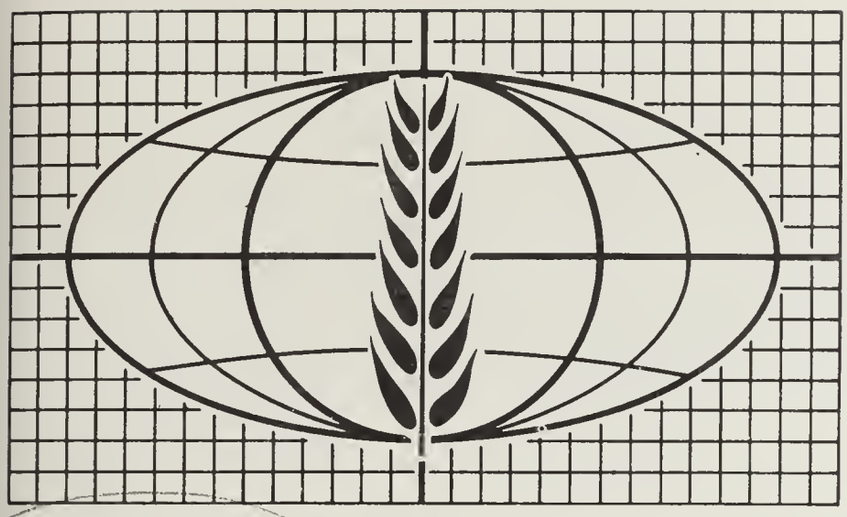

ERS-Foreign 294

THE AGRICULTURAL SITUATION IN THE WESTERN HEMISPHERE

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

ABSTRACT: Canadian agricultural production continued a recovery trend in 1969, but 1970 wheat output is expected to be cut back sharply in face of an unprecedented buildup in stocks. Latin American production exceeded the 1968 record despite poor weather in some areas, particularly Mexico, Central America and Chile. Large world supplies continued to restrict Hemisphere wheat exports. But Latin American exports were higher due to increases in feedgrains, cotton, coffee, cocoa beans and meat. U.S. agricultural exports to the region were below high 1968 levels partly because of the shipping strike, but are expected to recover in 1970.
KEY WORDS: Agricultural production and trade in Canada, Latin America.

FOREWORD

This annual review of the Western Hemisphere Agricultural Situation supplements World Agricultural Situation: Review of 1969 and Outlook for 1970, FAER 57. er 1969 regional reviews are being published for Western Europe, the Communist Areas, ica and West Asia, and the Far East and Oceania.

s report omits the Agricultural Situation of the United States and Cuba which is ered in other situation and outlook statements of the Economic Research Service. tern Hemisphere as used in the report, unless specified otherwise, refers to Canada 23 Latin American countries. Values are in U.S. dollars. All tons are metric, 04.6 pounds; hectares are equivalent to 2.471 acres. Data in the report may differ m that used in the World Agricultural Situation due to the later publication date.

Howard L. Hall, Assistant Branch Chief and Leader of the Situation and Outlook tion, directed and coordinated preparation of the report. Others participating inded Gae A. Bennett, Wilbur F. Buck, Mary S. Coyner, Anna P. Dilkes, Richard M. nedy, John D. McAlpine, Rena E. Perley, Samuel O. Ruff, and Betty J. Thomas

U.S. Agricultural Attaches for Western Hemisphere countries provided background the report through annual situation and commodity reports.

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Washington, D.C. 20250 April 1970

THE AGRICULTURAL SITUATION IN THE WESTERN HEMISPHERE

SUMMARY

Canada's farm output continued a significant recovery in 1969. Latin American production was moderately above the 1968 record but per capita output declined for the second successive year. Large world wheat supplies caused Canadian farm exports to tumble but Latin American exports were up again in 1969. The region's agricultural imports continued to rise in response to increased income and strong food demand. However, U.S. agricultural trade with the Hemisphere countries was below high levels of a year earlier, partly because of the shipping strike in early 1969. The Hemisphere's 1970 exports may be lower for wheat and cotton with a possible rise in other commodities; some recovery is anticipated for U.S. agricultural trade with the region.

Excellent growing conditions resulted in bumper Canadian harvests of grains and oilseeds in 1969 but livestock output was lower. In Mexico, cotton plantings were reduced and bad weather contributed to sharp production losses in corn and other late-harvested crops. Recoveries in Central America's coffee and sugar production were offset by its cutback in cotton and by hurricane damage to its banana and late-season food crops.

Sugar output gained in the Dominican Republic where moisture conditions were improved but was off in Jamaica and Peru due to early drought. Dry spells cut back Chile's 1969 food harvests. In Brazil, reduced plantings and midyear drought reduced corn production; but coffee production recovered and 1969 harvests of cotton, cocoa beans, and wheat exceeded previous records. Argentina's oilseed crops were again hit by poor weather. The Republic's wheat and corn production was higher and its sorghum grains and meat reached record production highs.

Led by a shortfall in Canadian shipments, Hemisphere wheat exports dropped 20 percent below the reduced 1968 total. A strong recovery in the Argentine trade boosted Hemisphere corn exports about 10 percent above the 1968 low. Cotton shipments were up more than 20 percent, reflecting a large carryover. Coffee exports gained slightly and cocoa bean and beef movements were near record. The Hemisphere's sugar trade dropped about 8 percent in 1969 partly due to reduced supplies in Peru. Banana exports were slightly below the 1968 high. Hemisphere wheat and rice imports were down slightly following a 1968 buildup of supplies in some countries. But purchases of feedgrains, oats and oils, and other food commodities moved to higher levels.

Expanding industrial production and exports during 1969 helped maintain a rising economic growth trend in Canada. Growth slowed in Mexico due to the dropoff in agriculture. But rate gains in Argentina, Brazil, Colombia, Costa Rica, and the Dominican Republic more than offset lower rates in Nicaragua, Venezuela and others. For the 22 Latin American countries, real growth in gross domestic product (GDP) likely neared 6.3 percent in 1969, compared with 5.9 percent in 1968. The Hemisphere trend toward monetary stability was strengthened by gains in exports, tourist earnings, and capital inflows. Foreign exchange reserves moved to higher levels in Canada, Brazil, Chile, Colombia, and Venezuela. A prospective falloff in trade may weaken the Canadian economy in 1970, but Latin American growth should continue near recent high levels.

Due to an unprecedented buildup in supplies, Canadian wheat probably will undergo a drastic production cutback in 1970. Latin America's wheat production will remain at relatively low levels despite continued expansion in Brazil. With bumper feedgrain

harvests forecast for Argentina and Brazil, Hemisphere supplies may be record high th year. Cotton exports will reflect sharply reduced availabilities in Mexico and Centr America. Because of severe 1969 frosts, Brazil's new coffee crop will be one of its smallest. And its reduced carryover is expected to maintain upward pressure upon wor coffee prices. Hemisphere imports of grains, fats and oils, meat, dairy and other ag cultural products are expected to increase in 1970. As a result, U.S. agricultural e ports to the region should recover and possibly exceed the 1968 high of about $1.1 billion.

NORTH AMERICA

Canada

Canadian agricultural output continued to rise in 1969. An expanded rate of economic activity was supported by increased investment, larger exports, and a high level of consumer spending. Real GDP growth was near 5 percent, moderately above the year-earlier advance and about twice the 1967 rate. The strong rate of business expansion apparently weakened late in 1969 in the face of climbing prices and interest rates. Inflation and some prospective slackening in exports point to a lower rate of economic growth in 1970.

Rising incomes lifted consumer expenditures slightly above the high 1968 level. The economy was strengthened by investment expansion for plant and equipment, particularly in the petroleum and metals processing industries. The real value of industri output rose 5 percent compared with a 1968 gain of 4.5 percent. The unemployment rat declined early in 1969, but later increased to near the year-earlier rate of 5 percen Growing inflation plagues government and monetary authorities.

Economic growth was bolstered by automotive exports, principally to the United States, which exceeded the 1968 high by more than one-third. Despite sharply reduced sales of agricultural products, total 1969 exports surpassed the previous year's reco by about 10 percent. Gains in exports were overshadowed by larger imports. The rise in foreign exchange reserves was also limited by deficits in travel and other service

There are signs that heavy industrial investment may continue in 1970. However, exports probably will be limited by the economic slowdown in the United States which accounts for about two-thirds of Canada's foreign sales. Despite Canada's efforts to control inflation, rising prices may contribute to an economic slowdown and GDP growt could be as low as 3 percent.

Farm output continued to rise in 1969. The index of agricultural production was estimated at 142, up about 5 percent from the previous year (1957-59=100). With growing conditions generally favorable, the crop index increased 9 percent despite a decline in seeded area. Livestock output dropped 2 percent below the 1968 peak because of reduced cattle and hog numbers and some rebuilding of herds.

A cold, wet spring delayed planting of 1969 crops in the Prairie Provinces. Anticipating lower prices, farmers there diverted much acreage from wheat to other grai and oilseed crops and to a record summer fallow area. Post-planting growing conditio in that region were unusually good and yields of wheat and feedgrains were almost records. Wet weather reduced production and quality of some crops in eastern Canada including corn, soybeans, and potatoes. Sharply reduced wheat board payments to Prair producers contributed to a 13-percent decline in total Canadian crop receipts. Return from livestock increased 5.5 percent. Farm operating costs continued to rise and net farm income fell by 10 percent to reverse an uptrend several years in progress.

Despite a 15-percent reduction in Canadian plantings, the 18.6 million-ton wheat rop was exceeded only in 1963 and 1966. The harvest, added to the large August 1 arryover of 23 million tons, raised 1969/70 (August-July) supplies 45 percent above ie year-earlier record. Wheat feeding requirements for the current year are limited large supplies of other feedgrains, and domestic requirements are estimated near the 968/69 level of 4.5 million tons. Current exports are running below the reduced rates a year earlier. To relieve the paralyzing surplus, the government recently set up $100 million subsidy program to shift three-fourths of the country's 12.1 million ectares of wheat land to forage crops and fallow for 1970/71. Producer delivery iotas for the 1969/70 crop will depend upon compliance with the program.

Corn production fell 10 percent in 1969 but the barley harvest was up sharply from ie 1968 record. Smaller increases were reported for oats and mixed grains. Total eedgrain production rose 7 percent to 17.4 million tons and 1969/70 (August-July) ipplies of 24 million tons exceeded the previous year's record by about 16 percent. 3.5 percent rise is estimated for feed use but another significant buildup in August 970 stocks is anticipated.

Due to increased area, the flaxseed harvest exceeded the high 1968 level by 56 ercent. Rapeseed production was an alltime high, nearly double the previous year. ybean production fell due to adverse weather but 1969 oilseed output rose more than percent. The tobacco crop was a record and the apple harvest was larger. Produc-ion of potatoes and other root crops was reduced by wet weather.

Due to reduced numbers and a rebuilding of herds, cattle exports declined sharply 1969; slaughter was nearly 4 percent below the 1968 peak. Hog slaughter was about percent below the reduced levels of a year earlier. Despite higher feeding rates d increased slaughter weights, red meat production was down. This short fall was rtially offset by a significant output gain in poultry meat. Milk production in-eased but a mounting butter surplus is threatening the dairy support program. cember 1, 1969 cattle numbers were 3 percent above a year earlier, reflecting con-derable herd expansion on farms in western Canada. A further buildup in farm herds y continue to limit cattle marketings in 1970. However, hog numbers on farms in-eased 13 percent in 1969 to the highest level since 1958, indicating a significant 70 rise in pork production.

Canada's agricultural exports for 1969 were about two-thirds of the 1968 value vels. Sharp shipping drops in grains and livestock products were only partly offset larger sales of oilseeds and tobacco. However, U.S. agricultural imports from nada were about 8 percent above 1968. Canadian imports were up significantly due to rger purchases of livestock products, particularly meat. U.S. agricultural exports Canada rose about 5 percent above the $485-million level maintained since 1966.

Agricultural exports are expected to continue at low levels during 1970. Small ins are projected for wheat based upon an increase in sales to Communist countries. nada's August-January 1969/70 exports of oilseeds and barley were above year-earlier tes. Sales of other grains will be lower. Exports of cattle and livestock products ll be restricted by strong domestic demand. Domestic requirements will also maintain essure for larger imports of fruits, vegetables, and other food products.

xico

Growth of investment, trade, and consumer demand maintained a strong advance in onomic activity during 1969. However, lower agricultural output and tight money and edit held real GDP growth near 6.5 percent. That compared with a 7.1 percent rise in 68. Growth in 1970 may be higher assuming an average agricultural year and some rther narrowing of the trade gap.

Substantial public investment in agriculture, forestry, fisheries, petroleum, petrochemicals, transportation, and communications swelled employment ranks. The mid-1969 index of industrial production was 11 percent above the 1968 average, reflecting increased sales of building materials, synthetic fibers, chemicals, fertilizers, and paper. Exports through October 1969 were nearly 20 percent above a year earlier. The import rise was held to 5 percent, narrowing the trade gap. However, tourist earnings declined from the 1968 olympic-year peak and foreign exchange reserves were down about 1 percent.

Much of Mexico's increased public investment was channeled into agriculture and rural development. In President Diaz Ordaz's address recounting achievements of the administration the past year, he listed a number of changes affecting agriculture. These included the distribution of 3.7 million hectares of land benefiting 63,300 farmers; the construction of 19 water storage dams, and the completion of reclamation projects to improve 145,000 hectares of land.

Mexico's 1969 downturn in agricultural output was its first in more than a decade. Many crops were reduced by extended drought in north-central areas and by heavy rain and flooding in the southeast. Partly because of sharply curtailed cotton outturn, the 1969 index of agricultural production dropped 6 percent to 143 (1957-59=100). Reduced harvests of corn, rice, beans, and oilseeds more than offset increased production of wheat, sorghum grains, sugar, fruits and vegetables, and meat. The food production index dropped about 4 percent below the 1968 peak.

A sharp recovery in irrigated wheat production was attributed to ideal growing conditions. Favorable weather and a 7-percent increase in area helped maintain the uptrend in sorghum grain production. However, rice production dropped one-third as heavy rains and flooding reduced harvested area and yields. Corn plantings were record high. However, northern drought and floods in the important producing areas of Veracruz, but total 1969 corn production by more than 16 percent.

Poor weather offset larger plantings of potatoes and the 1969 bean harvest fell 15 percent to interrupt the rising trend of recent years. Yields of soybeans and sesame seed were much lower, and cottonseed output was 30 percent less than the large 1968 outturn. Although safflower recovered to near-record levels, total oilseed production was down about 16 percent. That means Mexico will need to import vegetable oils this year.

Cotton land was shifted to competing crops. This and flooding in some areas reduced 1969 output nearly one-third to the lowest level since 1959. A larger 1969 sugarcane harvest was more than offset by lower sugar yields, but supplies were ample for domestic and export commitments. The coffee crop was a record high and the 1969 harvests of fruits and winter vegetables gained significantly over 1968.

A shortage of feed and water in parts of the northwest resulted in cattle losses and larger than usual slaughter. Beef production moved up to a record level about 9 percent above the previous year. Output of other meat was near year-earlier levels but dry pasture restricted the rise in milk production.

Due to a large 1968 carryover, exports of cotton were up sharply from a year earlier. Sugar exports were lower but 1969 cattle exports probably exceeded those in 1968. Feedgrain exports were reduced sharply and corn was imported late in the year to meet domestic needs. Increased feedgrain purchases were reflected in a 13-percent rise in U.S. agricultural exports to Mexico in 1969. U.S. agricultural imports from Mexico continued to increase and exceeded the 1968 record by 8 percent.

The 1970 outlook is for a sharp drop in cotton exports which will be partially offset by a continuing rise in winter vegetables and other products. Deficits in

feedgrains and vegetable oils will add to the strong import demand for dairy products, tallow, hides and skins, and certain U.S. processed foods.

CARIBBEAN

A higher rate of economic growth in 1969 resulted from the continuing expansion in tourism and a rising level of investment in mining, manufacturing, construction, and related activities. The growth rate rose sharply in the Dominican Republic. Rates were also higher in Barbados and Haiti, but weakened in Trinidad and Tobago partly because a drop in petroleum output. Real 1969 GDP growth for the five Caribbean countries (excluding Cuba) was near 4.6 percent, compared with a 3.3 percent rise in 1968. Although unemployment and rising prices are serious problems in many areas, continued strong growth trends are anticipated in 1970.

Tourist arrivals for the region, estimated at 10 percent above 1968, continued to encourage expansion of construction and service activities in Barbados, Haiti, Jamaica, Trinidad and Tobago, and other areas. The Caribbean Free Trade Association (CARIFTA) has stepped up trade between member countries. This move may accelerate development of light industry, particularly in Jamaica and Trinidad and Tobago. The Caribbean Development Bank, approved in October 1969 with an initial capital of $50 million, may contribute to additional trade gains.

The agricultural situation improved in 1969. The combined index of production for four countries (excluding Barbados and Cuba) rose 7 percent to 105 (1957-59=100). Near-normal growing conditions encouraged a significant recovery from the 1968 drought. The Dominican Republic's production was a record. Jamaica's agriculture was affected by early dry conditions and later wet weather, and production declined for the second year. Agricultural expansion in Trinidad and Tobago was slowed by adverse weather which cut yields of some important export crops.

Production of sugar, the Caribbean's principal agricultural export, was 8 percent above the reduced 1968 outturn but significantly below high levels of the early 1960's. The Dominican Republic's production increased one-fourth to the highest level since 1962 and Haiti's output was up significantly from 1968. Production in Trinidad and Tobago was down slightly. Output continued to decline in some other areas including Barbados and Jamaica.

Coffee and cocoa bean crops were above the 1968 level due principally to larger harvests in the Dominican Republic. Banana crops were larger in most areas. But adverse weather reduced export supplies of citrus in Jamaica and Trinidad and Tobago. Growing conditions were unusually favorable for food crops in the Dominican Republic where 1969 harvests of rice and peanuts were well above previous records. Harvests of domestic food crops exceeded 1968 in most areas. The region's production of livestock also continued to rise in 1969.

Due to the rise in agricultural output, 1969 agricultural exports probably were higher but imports may have leveled off or declined following the sharp 1968 rise. U.S. agricultural imports from the Caribbean were up 3 percent from the previous year, reflecting larger purchases from the Dominican Republic. Partly because of increased competition from other grain suppliers, U.S. agricultural exports to the region declined 5 percent from the record 1968 level.

The outlook for 1970 and the years immediately ahead is for a continuing decline in the relative importance of Caribbean agriculture as tourism, mining, and manufacturing industries continue to grow. Due to its economic importance, agricultural production in the Dominican Republic may maintain an uptrend. Prospects for a significant expansion of agriculture appear limited in other areas, and larger imports will be

needed to meet growing requirements for food and related products. Despite commonwealth trade preferences and increased competition, U.S. agricultural exports to the region should continue to expand.

CENTRAL AMERICA

Agricultural and trade problems further weakened economic development in Central America during 1969. Real GDP growth of 4.7 percent for the region compared with a reduced rate of 5.4 percent in 1968. Growth rates improved in Costa Rica and Panama. But they continued down slightly in El Salvador and fell off sharply in Honduras and Nicaragua.

Intraregional trade, which had stimulated business activity in the Common Market (CACM) countries through 1967, was disrupted by the July conflict between El Salvador and Honduras. The conflict resulted in imposition of minor bilateral restrictions on industrial products. The two countries have not reestablished trade and diplomatic relations.

Agricultural conditions were favorable in Central America until September 1969. Then hurricane "Francelia" struck with high winds and torrential rains, affecting some crops in El Salvador and Nicaragua. But its major impact was the loss in bananas grains, cotton, and livestock in Honduras and Guatemala. A slight rise in food production and strong recovery in coffee were offset by a cutback in cotton; the 1969 index of agricultural production was near the 1968 value of 152 (1957-59=100).

The foodgrain area continued to increase in 1969 partly reflecting a shift from cotton to corn, but production was slightly below the 1968 record. Damage from flooding restricted the increase in Guatemala's corn production; an increase in El Salvador was offset by reductions in Honduras and Nicaragua. Rice plantings were reduced in El Salvador and adverse weather in Costa Rica and Nicaragua contributed to a 13 percent drop in the region's 1969 harvest. The Central American sorghum grain harvest was up about 8 percent, but bean production was reduced by wet weather.

Due to sharp cutback of plantings in Guatemala and Nicaragua and bad weather in some areas, the 1969 cotton harvest was about 20 percent below a year earlier. Hurricane damage to Honduras bananas was more than offset by larger harvests in Costa Rica and Panama. Sugar production was at record levels in all countries except El Salvador where yields were reduced by dry weather early in the growing season. Coffee production recovered in all countries except Costa Rica and the combined harvest exceeded the 1968 outturn by about 7 percent. Output of livestock products rose 3 percent, continuing recent trends.

Larger 1969 exports of cotton and sugar were probably more than offset by smaller shipments of coffee, bananas, and meat. Wheat imports were near the previous year's level but rice imports increased sharply. U.S. agricultural imports from Central America continued to rise, exceeding the 1968 record by about 3 percent but U.S. agricultural exports were down 12 percent from the previous year's total.

SOUTH AMERICA

Argentina

The Argentine economy continued an upsurge in 1969 paced by the rapid rise in industry and trade. Real GDP increased 7 percent compared with a 4.8 percent rise in 1968. Booming manufacturing, construction, and public works activity brought upward pressure upon prices which was contained by budgetary, wage, and credit controls.

nother good year is anticipated in 1970 even though government hopes to slow the rowth rate and thus reduce pressure upon prices.

The high level of economic activity reduced unemployment and contributed to a sing demand for goods and services. Exports rose sharply reaching the highest level 30 years. Imports increased even more rapidly due to rising industrial demand and e need to replace depleted inventories. Foreign exchange reserves dropped 30 per-nt below the 1968 peak but were still at the highest level since 1950. The 1969 ad-nce in general price levels was the smallest in several years. However, wage in-reases granted in face of labor unrest late in 1969 increased pressure on prices and d to application of selective price controls.

The agricultural situation improved in 1969 although dry weather reduced plantings d crop yields in northern zones. The important central and southern areas recovered om 1968 drought conditions and the 1969 index of agricultural production rose 7 per-nt to approximate the high 1967 level of 118 (1957-59=100). Larger plantings and vorable growing conditions indicate an increase in early 1970 grain and oilseed ops, and a continued high level is anticipated for meat production.

Strong export demand for feedgrains led to another expansion in seeded area, con-ibuting to a significant 1969 recovery in corn production and a record sorghum grain rvest. The rice area continued to expand and production of 345,000 tons was 22 per-nt above the 1968 record. Unusually dry conditions in northern areas and dissatis-ction with support price levels resulted in a 6 percent decline in the 1969/70 wheat ea. The midyear drought also restricted planting of oats, barley, and rye in the rth where the harvested area of late-cereal crops was further reduced by heavy graz-g. Those grain crops benefited from improved moisture near harvest and 1969/70 wheat oduction reached 6.8 million tons, up 1 million tons from 1968. According to pre-minary official estimates, the 1970 corn crop may reach 9.1 million tons, the largest nce 1941. The sorghum grain crop is forecast near 3 million tons, about 20 percent ove the 1969 record.

Favorable prices stimulated larger plantings of the principal oilseed crops. But e peanut area and yields were reduced by drought and tung nut production declined arly one-half. Dry weather also reduced the northern flaxseed harvest but improved nditions in other areas brought an overall rise in production. Sunflower plantings creased 10 percent but drought resulted in a second year drop in output to 876,000 ns and a domestic shortage of sunflower oil was only partly alleviated by increased ttonseed oil production. The sunflower and cotton area for 1970 each increased out 5 percent and sunflowerseed output is expected to exceed 1 million tons.

Cotton production was up in response to higher prices resulting from reduced ocks and a domestic oilseed shortage. Sugar production increased again despite pro-ction restraints. Potato production maintained a rapid rise due to increased use of rinkler irrigation but large supplies and depressed prices may reduce plantings in 70. The apple and pear crops were reduced by frost but citrus harvests were up arply from previous records.

The upswing in cattle numbers continued. There were an estimated 52 million head mid-1969, up 1 percent above a year earlier. An improved export outlook and favor-le pastures encouraged some holdings for heavier slaughter weights but slaughter in-eased in response to strong domestic and export demand. Beef and veal output was 11 rcent above the 1968 record and a continued high production level appears likely in 70. Pork production continued near the reduced 1968 level due, in part, to a buildup numbers late in 1969. Reduced lamb and mutton output reflected the decline in sheep mbers induced by low wool prices. Wool output rose due to improved pasture con-tions and there were signs of a slowdown in liquidation of sheep flocks.

Agricultural exports rose sharply from the reduced 1968 level due to larger feedgrain and meat sales. Corn exports increased one-third based on larger shipments to Spain and Italy. An expanding Japanese feedgrain market helped raise sales of sorghum grains from 0.5 million tons in 1968 to 1.3 million tons in 1969. An unusually large carryover offset a reduction in the 1968/69 wheat harvest and 1969 exports were maintained near the 1968 level of 2.4 million tons. However, 690,000 tons were imported late in the year to maintain domestic stocks. Domestic shortages and high prices prohibited sales of sunflower oil and reduced sales of other vegetable oils. Exports of livestock and livestock products moved up by more than one-fourth reflecting the relaxation of British restrictions and the continued sharp rise for special cuts and manufacturing meats. Sales of cooked-frozen beef to the United States were held near the 1968 level by the U.S. dock strike.

Wheat exports in 1970 will probably be held near the 1969 level due to some build up in carryover stocks and to the strong export demand for feedgrains which appears to be encouraging increased domestic use of wheat for feeding. Corn exports this year could reach 5.5 million tons and sorghum grains 1.8 million tons. Vegetable oil exports are expected to recover with resumption of more normal supplies. A continued rise in beef exports is expected as the industry takes advantage of lower U.K. tariffs on boned beef, although some curtailment of domestic consumption may be required.

Brazil

The Brazilian economy maintained strong momentum in 1969 supported by rapid industrial growth, rising exports, and a significant recovery of agriculture. Official Brazilian sources estimated that real GDP growth was near 9 percent compared with a revised 1968 rate near 8 percent. Government policies maintain strong incentives for development and the 1970 growth is expected to be near high rates achieved the past 2 years.

Despite some slowdown late in 1969, industrial growth exceeded 10 percent for the second year. Rising investment and demand maintained strong advances in transportation equipment, metallurgy, chemicals and utilities; construction and service activities also continued a strong rate of expansion. Gains in sales of manufactures and an advance in coffee prices boosted export earnings to $2.2 billion from the 1968 record of $1.9 billion. Imports were higher but foreign exchange reserves more than doubled from January to November 1969.

Late in 1969, a sharp rise in food prices tempered consumer demand and caused an excessive stock accumulation of some manufactured products. However, recent surveys indicate a continuing rise for private investment. The new government has given a high priority to further expansion and diversification of exports and to a strengthening of existing agricultural programs. New production incentives were provided by a recent law exempting farm machinery, fertilizers, seeds, and other agricultural inputs from state sales taxes which range from 15 to 17 percent.

The effect of improved agricultural programs, initiated in 1967, was partially offset by a second year of drought which restricted yields of food crops in the East-Central State of Sao Paulo and bordering agricultural areas. In southern Brazil, growing conditions were favorable and levels of precipitation in usually dry northeastern areas were well above normal. The 1969 index of agricultural production was estimated at 140, about 4 percent above 1967 and 1968 (1957-59=100). The gain was attributed, largely, to recovery in coffee and the continuing rise in cotton. Although the 1970 coffee harvest will be reduced by the severe July frosts, the current outlook is for an agricultural production rise of at least 6 percent.

Depressed prices at planting time encouraged farmers to shift from corn to other ops including cotton and soybeans in southern areas. This shift and drought in other eas contributed to a 10-percent decline in 1969 corn production. The rice harvest opped 2 percent reflecting a small reduction in planting and some disease problem in e important producing areas. Due to Brazil's improvement program and ideal growing nditions, wheat production rose sharply for the second year and the 1969 harvest exeded the previous year by nearly 50 percent. Further expansion in wheat is anticited for 1970 and a near-record rice crop is forecast. Higher prices stimulated a arp rise in corn plantings and the 1970 crop is estimated at an alltime high exceedg 1969 by more than 20 percent.

Adverse weather offset a rise in bean planting and contributed to a second reduced op. The potato harvest declined due to a smaller area and to dry weather which also wered yields of some other vegetable crops. Drought reductions offset larger plantgs of peanuts but an expanded area and good growing conditions resulted in record tturns of other oilseeds including cottonseed, soybeans, and castorbeans. Livestock aughter maintained a slight rise in meat output. Milk production continued an upend, estimated near 4 percent.

Southern farmers continued a shift to cotton. Unusually favorable weather conibuted to a 1969 harvest which exceeded the 1968 record by 20 percent and plantings r the 1970 crop are up again by about 10 percent. The 1969 cocoa bean harvest was so a record, up more than 10 percent from a year earlier. An increase in northeastern garcane production more than offset a southern sugarcane harvest reduced by drought.

The 1969 coffee crop exceeded the small 1968 harvest by about 15 percent. Hower, 1969 represented the fifth year in the last six when production did not meet nestic and export requirements, estimated near 1.6 million tons. The 1969 harvest s followed by severe July frosts in Parana and a much smaller 1970 crop is expected. th the prospective 1970 carryover estimated significantly below requirements for the rst time in more than a decade, the new government aims to increase coffee plantings the traditional forst-free zones. Prospects for a reduced 1970 harvest also enuraged producers to hold 1969 coffee, contributing to a sharp rise in world prices te last year.

Agricultural exports were valued at an alltime high in 1969. Due to higher prices d a slight rise in shipments, coffee exports were at the highest level since 1957. rnings from other traditional exports including cotton, cocoa beans, and sugar set cords along with newer commodities including beef and soybeans. Increased production d improved trade incentives also stimulated sales of other products including oileds, tobacco, and hides and skins but corn and rice exports were reduced in face of wer supplies. U.S. agricultural exports to Brazil dropped 22 percent and U.S. agriltural imports from Brazil were about 11 percent below the 1968 high.

ile

Chilean economic activity was maintained near the previous year's low level early 1969 but moved up late in the year. Real GDP growth probably exceeded the low 0.8 rcent rate estimated for 1968. Expanding output and higher prices for copper pushed ports to a new record and helped raise foreign exchange reserves to the highest level more than a decade. A rise in manufacturing activity was stimulated by relaxing of port restrictions in late 1969. A recovery in agriculture is anticipated in 1970 spite growing inflationary pressures and uncertainties connected with next September's esidential elections, this could be a year of faster economic growth.

Agricultural output, in 1969, was adversely affected by drought in Chile's central lley, perhaps the worst in recorded history, which continued from mid-1968 into early

1969. Livestock losses were high in the affected areas but favorable conditions in the rainy southern zone and more effective use of irrigation water supplies helped to reduce the expected level of crop losses. However, a 17-percent decline in the crop index was only partially offset by increased output of livestock products. As a result, the 1969 index of agricultural production dropped 7 percent to 110 (1957-59=100).

An increase in the wheat area offset some drought effects and 1968/69 production approximated that of the previous year. The combined 1969 output of rice, corn, and other feedgrains declined about one-half. Due, in part, to lower water requirements and announcement of higher support prices in advance of planting, 1969/70 wheat was expanded to some corn and rice areas and a record crop is forecast. Although a substantial 1970 recovery is anticipated for corn and rice, production will probably not reach the high 1968 levels.

Drought cut 1969 sunflowerseed production by about 40 percent but the southern rapeseed harvest was up sharply and total oil supplies exceeded the previous year. The 1969 harvests of beans and potatoes were much smaller but sugarbeet output was near the 1968 record. The drought impact upon fruit and vegetable production was softened by priority water allocations given to high-valued crops. The 1968 drought reduction of cattle numbers contributed to a slight decline in 1969 beef output, although dry pastures forced heavier slaughter early in the year. Pork output responded to increased demand and mutton and milk production benefited from excellent pasture conditions in the south.

Agricultural exports fell in 1969 because of reduced availabilities of onions, pulses, and fruits. Imports were up moderately from the high 1968 level. Corn, rice, and potato purchases rose sharply but wheat imports dropped to nearly one-half the 1968 level of 416,000 tons. U.S. exports of corn to Chile increased sharply and sales of breeding cattle continued at a brisk pace. Due to a decline in wheat, total exports fell 26 percent to $26 million.

Colombia

In 1969, the Colombian economy maintained the strong advance in progress since 1966. Domestic demand, rising trade, and improved monetary stability continued as a stimulus to investment and business activity. Gross domestic product, in real terms, increased from 5.6 percent in 1968 to about 7 percent last year. Increased economic activity exerted some upward pressure upon cost-of-living which increased about 9 percent compared with a year-earlier rate near 6 percent. Larger exports were more than offset by the rise in imports but foreign capital inflows helped raise gold and foreign reserves to a record $221 million.

Although agricultural output continued to expand in response to government-sponsored programs to increase exports, extended dry weather near midyear reduced yields of some highland crops. The 1969 index of agricultural production moved up to 130, nearly 2 percent above the 1968 record. Coffee output continued near the reduced levels of recent years. The rise in agricultural production was attributed to recovery in corn, a continuing expansion in minor export crops, and a significant rise in output of livestock products.

Dry weather reduced yields of food crops grown at the medium and higher elevations. Due to lower yields and a shift to other crops, wheat production fell by one-third to a 10-year low. Rice output dropped 8 percent below the 1968 record due to reduced area and some disease problems. Increased plantings contributed to a sharp recovery in corn production and a larger barley harvest.

A 20-percent increase in cotton area was partially offset by a sharp drop in the ld-1969 harvest in the Upper Magdalena Valley. Total fiber production increased about percent. Larger oilseed supplies contributed to a 22-percent increase in 1969 pro- uction of edible fats and oils. Sugar output rose 4 percent and banana production ontinued an uptrend. Milk production was up significantly and beef output rose 8 ercent, reflecting increased export incentives and the buildup in cattle numbers, eginning in 1965.

Coffee exports for 1969 increased in value due, principally, to price gains late n the year. Foreign sales of cotton, cattle, and meat were up sharply from a year arlier. Imports of wheat and other agricultural products were slightly lower due, n part, to a 1968 buildup in stocks. U.S. agricultural imports from Colombia con- inued to decline in 1969 and U.S. farm exports were down slightly from the record 968 total.

cuador

Ecuador's economy continued to expand in 1969 but real GDP growth was estimated omewhat less than the 1968 rate of 5.1 percent. Agriculture recovered from the 1968 rought but export earnings fell below previous high levels despite a pickup in banana xports late in 1969. Manufacturing and business activity maintained a moderate up- rend paced by the continued strong rise in electric power and construction. The alance-of-payments and monetary situation remained critical despite an improvement ollowing the midyear crisis. Discovery of additional eastern oil fields is promising nd construction of a trans-Andean pipeline has started. The new fields are expected o supply Ecuador's petroleum requirements at a substantial savings in foreign exchange.

Agricultural conditions improved greatly in 1969. The index of total agricultural roduction increased 3 percent to 145 (1957-59=100). Although wet harvest weather owered yields of some basic crops, the 1969 index of food production was a record, ex- eeding the 1968 low by about 7 percent.

The 1968 drought contributed to a sharp drop in 1969 coffee production. Highland arvests of wheat, barley, beans and potatoes were below high 1968 levels. However, he rice and corn crops were alltime highs. Sugar output continued to expand, exceed- ng the 1968 record by more than 15 percent. Pasture conditions were favorable and utput of livestock products maintained a moderate uptrend.

Banana exports continued to decline in 1969 in face of larger world supplies al- though lower Central American production stimulated some recovery late in the year. Sugar sales abroad increased about 20 percent, but coffee exports dropped sharply and cocoa exports were lower. Agricultural imports were limited by higher food output and by import restrictions imposed late in the year. U.S. agricultural imports from Ecuador continued to decline in 1969. Our exports to Ecuador dropped 11 percent from the high 1968 value of $12.5 million.

Peru

Expansion in Peru's economic activity was restricted by uncertainty associated with reforms imposed by the new military government. Real 1969 GDP growth was near 2 percent, up only slightly from the 1968 low. A sharp rise in earnings from fishmeal and copper, the two leading exports, provided a trade surplus and foreign exchange re- serves rose from $111 million to $166 million in January-November 1969. Peru faces another difficult economic year in 1970, though some pickup is possible based upon re- covery in agriculture.

New decrees by the military regime were designed to enforce existing agrarian reform laws. These reforms aim at eliminating large holdings not in the social interest and replacing them with small and medium sized holdings or cooperatives of rural workers. Decrees provided 12 months for expropriation of all holdings of irrigated land exceeding 150 hectares in specified agrarian reform zones which include most agricultural land in the coastal area. During 1969, a total of 677,000 hectares were expropriated and 360,000 hectares were redistributed to 63,000 families. All major suga estates were placed under government administration and a few are being converted to cooperative operation. The government recently indicated it would institute 1970 expropriation actions involving 1.7 million hectares.

The severe drought was broken by rains late in 1968 but agricultural production was affected by low supplies of irrigation water in the coastal region during early 1969. Highland crops benefited from improved moisture but the 1969 index of agricultural production was near the reduced 1968 value of 118 (1957-59=100). Near-normal conditions are expected to stimulate some recovery in 1970 output.

Reduced supplies of irrigation water cut back the sugarcane harvest and 1969 suga production fell 20 percent to the lowest level in recent years. Low prices encouraged a reduction in the central-coast Tanguis (long staple) cotton area. Despite an increase in the northern Pima (extra-long) area, total 1969 production of cotton declined 3 percent. Rice plantings were up sharply and a 55-percent rise is indicated in production from the 1968 low. The highland production of basic food crops, including wheat, barley, and potatoes, was well above 1968. Coffee production gained slightly and output of fruit and other vegetable crops advanced. However, an 18-percent drop in beef production resulted in critical meat shortages.

Peru's agricultural exports in 1969 declined more than 20 percent reflecting sharp drops in sugar and coffee. Partly due to increased restrictions, imports were about 6 percent less than the previous year. Peru turned increasingly to other suppliers, and U.S. agricultural exports to the country continued a sharp downtrend in 1969 to a recent low of $15 million. Due to the sharp decline in sugar supplies, U.S. agricultural imports from Peru dropped 30 percent below the 1968 record of $96 million.

Uruguay

The Uruguayan economy turned up sharply in 1969 following a 2-year slump. A real GDP rise of 5 percent contrasted with a gain of less than 1 percent in 1968 and a 1967 crop of nearly 5 percent. Business activity was stimulated by some relaxation of import restrictions which also helped cut the cost-of-living rise from 66 percent in 1968 to about 15 percent in 1969. A moderate increase in exports improved balance of payments although foreign exchange reserves were reduced slightly by payment of past arrears. Good agricultural prospects and an expected improvement in labor relationships indicate further growth in 1970.

The 1969 index of agricultural production declined about 3 percent due to a sharp drop in beef output. Favorable weather conditions brought further recovery in crops from the 1967/68 drought and the crop production index moved up more than 6 percent to 115, the highest level since 1964 (1957-59=100). Attractive prices and good weather have resulted in a sharp expansion in plantings of 1970 feedgrains, and a buildup in cattle numbers indicates a sharp increase in meat production.

Due to improved moisture levels, the 1969 corn harvest was nearly double the 1968 low, rice production reached a new record, rapid expansion in sorghum grain continued, and sunflowerseed registered a significant recovery. Dissatisfaction with prices led to a severe cutback in wheat plantings for 1969/70 but the crop was sufficient for domestic needs. Flaxseed production rose due to a shift from wheat. The barley and

ts crops were smaller. Depressed prices contributed to a 54-percent decline in garbeet production.

Beef production dropped 18 percent in 1969 due to a 4-month strike by meatpacking orkers. Slaughter for domestic consumption was subsequently restricted to maintain eef exports in face of extra-legel movement of cattle to Brazil. A decline in sheep umbers maintained lamb and mutton near 1968 levels but wool production was lower. Im-roved pastures contributed to a sharp rise in milk production.

Agricultural exports were up in 1969 due to larger sales of wheat, rice and beef. eef moved to Spain and East European countries in face of the United Kingdom ban on ruguayan meat. Wool exports were down partly due to producer holdbacks for improved rices. Smaller wool supplies resulted in a drop in U.S. agricultural imports from ruguay. U.S. agricultural exports fell back from the 1968 peak to normal low levels ear $2.5 million.

enezuela

The Venezuelan economy slowed in 1969 due to lower petroleum output and reduced rowth rates for agriculture, manufacturing, and construction. GDP growth was near 3 ercent compared with a rise of 5.8 percent in 1968. The cost-of-living index was up ignificantly and investment incentives were weakened by a tighter money supply.

Agricultural output rose at a slower rate in 1969. Production was restricted by hortages of credit and by heavy and unseasonable rains which reduced crop yields. he 1969 index of agricultural production was estimated at 176, about 2 percent above he 1968 record (1957-59=100). The increase compared with a rise of nearly 6 percent n 1968, and significantly higher growth rates in previous years.

Rice production somewhat exceeded the 1968 record despite government efforts to educe the surplus. Restricted credit encouraged a shift from corn to other crops. arger plantings of beans and tobacco were more than offset by smaller yields. Wet eather also reduced harvests of sweetpotatoes and other food crops. Sugar production ontinued to expand and 1969 production exceeded the 1968 high by about 8 percent. eat and milk production was slightly higher than in 1968.

Agricultural exports, particularly sugar, were higher in 1969 and imports con-inued a moderate uptrend. U.S. agricultural exports to Venezuela were slightly above he 1968 high of $90.8 million and imports from Venezuela recovered to a value near 22 million.

ther South America

The Bolivian economy was weakened in 1969 by the unsettled political situation. eal GDP growth was near 3.5 percent in contrast to a 5.2 percent rise in 1968. Ex-ort earnings benefited from higher world tin prices but nationalization of the petro-eum industry interrupted exports and the construction of a gas pipeline to Argentina. gricultural production moved up slightly to an index of 113 (1957-59=100). Harvests f rice, corn, and barley were higher. Wheat production was a record for recent times, eflecting some effect of the government improvement program. Agricultural production rovides a small export surplus of some agricultural products including sugar, coffee, ice and wool. U.S. farm exports to Bolivia, principally wheat, continued to decline n 1969 and imports were maintained near the $2.3 million level of 1968.

Guyana's economy expanded at a slightly higher rate and GDP growth was estimated ear 4.5 percent in 1969. Exports and mining of bauxite continued to increase. The

rice harvest, down slightly due to unseasonable rains, was well below high levels maintained from 1964 to 1966. Sugar output was a record, up 14 percent. The index of agricultural production increased 7 percent to 127 (1957-59=100). Agricultural exports reflected larger sugar sales, principally to the United States and British Commonwealth markets. U.S. agricultural imports from Guyana rose to a record $13.5 million and exports to Guyana were up sharply to about $5 million.

The Paraguayan economy continued a moderate expansion in 1969. Real GDP was only slightly below the 1968 rise of 3.6 percent. The index of agricultural production rose 6 percent to a record 127 (1957-59=100). The national wheat program stimulated another substantial rise in production. The 1969 rice and soybean harvests were also records. Gains were registered for most other food crops. Cattle slaughter for export continued to decline but domestic meat production was near the 1968 level. Agricultural exports declined again because of smaller beef sales. Agricultural trade with the United States was near levels of a year earlier.

e 1.--Population, gross national product, and gold and foreign exchange holdings of Western Hemisphere countries and regions, annual 1968-69 1/

Country	Population			Gross national product			Gold and foreign exchange holdings 2/		
	1968	1969	Change	1967 3/	1968 Change 4/	1969 Change 4/	1968	1969	Change
	Thousands		Percent	Mil. dol.	Percent		Million dollars		Percent
da.	20,850	21,267	1.9	58,306	4.7	5.0	3,046	3,106	2.0
co.	47,267	48,921	3.5	24,532	7.1	6.5	657	662	0.8
ados.	253	256	1.2	92	4.5	5.0	n.a.	n.a.	n.a.
nican Rep.	3,966	4,101	3.4	1,090	4.0	7.5	36	40	11.1
i	5,017	5,143	2.5	324	-1.5	2.0	3	4	33.3
ica	1,913	1,949	1.9	1,019	3.0	4.0	142	140	-1.4
idad & Tobago	1,030	1,054	2.3	819	4.5	2.5	49	44	-10.2
r Caribbean	1,593	1,629	2.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ribbean	13,772	14,132	2.6	3,344	3.3	4.6	230	228	-0.9
a Rica.	1,640	1,696	3.4	664	6.5	7.5	21	29	38.1
alvador	3,205	3,314	3.4	890	3.5	3.0	62	64	3.2
emala	5,011	5,156	2.9	1,454	5.6	5.7	66	72	9.1
uras.	2,535	2,621	3.4	598	6.0	0.0	32	31	-3.1
ragua	1,804	1,862	3.2	670	5.6	4.5	48	44	-8.3
ma.	1,372	1,417	3.3	794	5.5	7.0	n.a.	n.a.	n.a.
r Cent. America	116	119	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ntral America	15,684	16,185	3.2	5,070	5.4	4.8	229	240	4.8
ntina	23,617	23,971	1.5	14,849	4.8	7.0	760	538	-29.2
via	4,441	4,548	2.4	731	5.2	3.5	40	42	5.0
il.	88,209	90,855	3.0	27,442	8.4	9.0	257	658	156.0
e	9,232	9,407	1.9	6,348	0.8	1.0	208	340	63.5
mbia.	19,825	20,459	3.2	5,636	5.6	7.0	173	221	27.7
dor	5,695	5,889	3.4	1,247	5.1	4.5	57	65	14.0
na.	710	731	3.0	241	4.0	4.5	24	21	-12.5
guay.	2,231	2,300	3.1	492	4.4	3.0	12	10	-16.7
.	12,772	13,168	3.1	4,626	1.5	1.8	111	167	50.5
guay	2,818	2,855	1.3	1,413	0.3	5.0	194	197	1.5
zuela	9,686	10,025	3.5	9,304	5.8	3.0	922	933	1.2
r So. America	415	429	3.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
uth America	179,651	184,637	2.8	72,329	5.7	6.4	2,758	3,192	15.7
n America	256,373	263,875	2.9	105,275	5.9	6.3	3,874	4,322	11.6
tern Hemisphere	277,223	285,142	2.8	163,581	5.5	5.8	6,920	7,428	7.3

/ Regional totals include only those countries for which data is shown. 2/ Total of gold, foreign exchange dings and reserve position in the International Monetary Fund. 3/ Value at current market prices converted U.S. dollars using the average end-of-quarter free or principal import rates of exchange. 4/ Estimates of l growth.

rces: IMF, International Financial Statistics; U.S. Agency for International Development; and official Government reports.

Table 2.--Indices of total and per capita volume of agricultural and food production of Western Hemisphere countries and regions, 1967-69 1/

(1957-59 = 100)

Country	Total						Per capita					
	Agricultural			Food			Agricultural			Food		
	1967	1968	1969	1967	1968	1969	1967	1968	1969	1967	1968	1969
Canada	126	135	142	127	136	141	106	111	114	106	112	113
Mexico	146	152	143	156	160	154	108	108	98	115	114	106
Dominican Republic	102	97	112	101	98	113	75	69	77	74	70	78
Haiti	83	81	80	89	86	89	67	64	62	72	68	69
Jamaica	115	108	104	113	106	102	96	88	84	94	87	82
Trinidad & Tobago	97	110	109	97	107	108	76	84	82	76	82	81
Caribbean	102	98	105	103	100	107	80	75	79	81	77	80
Costa Rica	142	148	148	133	149	156	103	104	101	96	105	106
El Salvador	143	131	144	131	138	133	107	95	101	98	100	93
Guatemala	160	162	156	148	158	163	120	118	111	111	115	116
Honduras	143	145	141	141	151	145	107	104	98	105	109	101
Nicaragua	190	187	168	178	188	176	145	138	120	135	139	126
Panama	142	149	154	142	150	156	107	109	109	107	110	110
Central America	154	152	152	145	155	155	115	110	107	108	112	109
Argentina	118	110	118	123	114	121	101	93	98	106	96	101
Bolivia	109	112	113	109	111	112	89	89	88	89	88	87
Brazil	135	135	140	154	157	158	104	101	101	118	117	114
Chile	115	119	110	116	120	111	94	96	87	95	96	87
Colombia	124	128	130	132	138	140	93	93	92	99	101	99
Ecuador	149	141	145	145	138	147	111	102	101	108	99	102
Guyana	120	119	127	121	119	127	93	89	92	94	89	92
Paraguay	123	120	127	115	106	114	95	90	92	89	79	83
Peru	125	118	118	134	121	121	96	88	85	103	90	87
Uruguay	97	112	113	98	117	120	86	98	98	87	103	104
Venezuela	163	172	176	176	186	190	119	121	120	129	131	129
South America	130	129	133	141	141	144	102	98	99	110	107	107
Latin America 2/	132	133	135	142	143	144	102	100	98	110	107	105
Latin America 3/	133	133	135	142	143	145	103	100	98	109	107	106

1/ Revised data for 1967 and 1968, preliminary for 1969. 2/ Production for 22 countries shown. 3/ Excludes Guyana, Jamaica, and Trinidad and Tobago.

ble 3.--Fertilizer use, in nutrient equivalent, for Western Hemisphere countries average, 1962-66 and annual 1967 and 1968 1/

Country	N			P_2O_5			K_2O			Total		
	Average 1962-66	1967	1968	Average 1962-66	1967	1968	Average 1962-66	1967	1968	Average 1962-66	1967	1968
	1,000 tons											
nada	150	277	335	259	374	400	119	162	178	528	813	913
xico	232	320	360	50	97	110	6	22	28	288	439	498
rbados	4	3	4	2/	2/	1	3	3	3	7	6	8
minican Rep.	9	14	18	1	1	1	1	1	2	11	16	21
iti	2/	1	1	2/	1	1	1	1	1	1	3	3
maica	8	5	11	2	2	5	6	8	10	16	15	26
nidad & Tobago	3	4	5	2/	1	1	3	4	5	6	9	11
Caribbean	24	27	39	3	5	9	14	17	21	41	49	69
sta Rica	14	17	16	11	6	7	5	8	9	30	31	32
Salvador	21	27	30	7	11	13	7	7	8	35	45	51
temala	9	20	14	5	11	10	2	3	1	16	34	25
duras	7	8	8	2/	1	2	2/	1	5	7	10	15
aragua	8	13	16	4	7	7	1	2	2	13	22	25
ama	4	10	11	2/	2/	2/	2/	2/	2/	4	10	11
Central America	63	95	95	27	36	39	15	21	25	105	152	159
gentina	16	26	37	5	19	21	3	6	8	24	51	66
ivia	2/	1	1	2/	1	1	2/	1	1	2/	3	3
zil	58	68	105	86	92	166	80	91	136	224	251	407
le	32	35	45	59	83	90	12	14	20	103	132	155
ombia	40	45	50	50	52	55	38	34	40	128	131	145
ador	6	7	27	5	7	19	3	4	12	14	18	58
ana	5	5	6	2	2	2	2	2	2	9	9	10
raguay	2/	2/	2/	1	1	2	2/	2/	2/	1	1	2
u	64	80	85	25	16	20	7	8	10	96	104	115
guay	7	7	10	22	21	23	3	6	7	32	34	40
ezuela	17	31	35	6	10	12	6	10	13	29	51	60
outh America	245	305	401	261	304	411	154	176	249	660	785	1,061
in America	564	747	895	341	442	569	189	236	323	1,094	1,425	1,787

/ Year ending on June 30 of year shown. 2/ 500 tons or less.

rce: FAO Production Yearbook of Agriculture.

Table 4.--Area and production of selected agricultural products by principal Western Hemisphere countries or regions, annual 1967-69 1/

Commodity by country	Area 2/			Production		
	1967	1968	1969	1967	1968	1969
	1,000 hectares			1,000 tons		
Wheat:						
Canada	12,190	11,907	10,105	16,137	17,686	18,623
Mexico	762	717	715	2,057	1,793	2,000
Central America	37	39	40	34	34	36
Argentina	5,812	5,837	5,110	7,000	5,740	6,800
Brazil	420	770	1,000	365	693	1,000
Chile	718	700	743	1,203	1,220	1,214
Uruguay	222	535	336	144	470	403
Other South America	370	398	404	336	375	367
Total Latin America	8,341	8,996	8,348	11,139	10,325	11,820
Rice, rough:						
Mexico	167	191	175	430	455	300
Caribbean	124	131	146	207	232	255
Panama	130	136	136	151	160	162
Other Central America	171	174	172	276	304	242
Brazil	4,291	4,568	4,553	6,792	6,652	6,520
Colombia	300	277	266	685	786	720
Guyana	138	138	138	197	212	210
Peru	107	45	80	461	195	300
Other South America	415	418	469	999	1,085	1,233
Total Latin America	5,843	6,078	6,135	10,198	10,081	9,942
Corn:						
Canada	354	388	396	1,882	2,062	1,864
Mexico	7,584	7,600	7,700	8,500	8,600	7,100
Caribbean	125	128	130	118	117	122
Guatemala	748	777	836	690	736	757
Honduras	410	412	412	355	390	375
Other Central America	606	619	593	578	630	639
Argentina	3,450	3,378	3,576	8,000	6,560	6,900
Brazil	9,274	9,584	9,121	12,824	12,814	11,500
Colombia	790	740	833	850	800	900
Peru	387	340	360	638	560	600
Venezuela	489	592	580	570	736	720
Other South America	975	835	837	1,165	968	918
Total Latin America	24,838	25,005	24,978	34,288	32,911	30,531
Grain Sorghum:						
Mexico	556	600	640	1,242	1,500	1,700
Caribbean	---	---	---	---	---	---
Central America	268	299	311	239	243	259
Argentina	765	975	1,206	1,380	1,500	2,484
Other South America	7	7	7	6	6	6
Total Latin America	1,596	1,881	2,164	2,867	3,249	4,449
Beans, dry:						
Canada	35	37	36	39	44	59
Mexico	2,240	2,250	1,800	1,008	1,056	900
Caribbean	51	52	60	42	39	46
Central America	335	350	354	199	212	202
Brazil	3,651	3,663	3,700	2,548	2,420	2,450
Chile	68	62	47	90	65	47
Other South America	396	391	416	266	260	268
Total Latin America	6,741	6,768	6,377	4,153	4,052	3,913
Sweetpotatoes and yams:						
Mexico	17	18	18	162	172	170
Caribbean	69	70	71	335	333	344
Central America	3	3	3	30	30	30
Argentina	42	41	45	444	379	476
Brazil	185	182	185	2,226	2,120	2,200
Paraguay	12	9	10	122	85	90
Peru	12	13	14	150	160	180
Other South America	41	41	40	313	306	305
Total Latin America	381	377	386	3,782	3,585	3,795

Continued--

le 4.--Continued

Commodity by country	Area 2/			Production		
	1967	1968	1969	1967	1968	1969
	1,000 hectares			1,000 tons		
atoes:						
anada	123	123	124	2,120	2,399	2,278
exico	38	40	48	378	400	576
aribbean	7	7	8	32	31	32
entral America	10	11	11	46	49	47
rgentina	164	200	203	1,797	1,967	2,340
olivia	120	123	125	635	670	670
razil	217	227	200	1,467	1,606	1,300
hile	77	80	76	717	725	603
olombia	79	85	85	800	900	900
eru	272	260	265	1,712	1,600	1,700
enezuela	17	17	17	151	159	143
ther South America	89	87	94	350	480	431
Total Latin America	1,090	1,137	1,132	8,085	8,587	8,742
ton:						
exico	692	720	553	435	537	370
aribbean	28	28	28	2	2	2
uatemala	86	92	77	78	73	51
icaragua	146	132	101	97	88	67
ther Central America	60	71	67	47	54	53
razil	2,038	2,266	2,696	449	606	730
olombia	172	202	242	97	120	128
eru	200	177	180	89	102	99
ther South America	444	412	520	114	103	148
Total Latin America	3,866	4,100	4,464	1,408	1,685	1,648
nuts:						
exico	70	39	43	56	47	56
aribbean	45	51	69	45	47	60
entral America	---	---	---	---	---	---
rgentina	328	287	244	354	283	217
razil	694	606	700	751	754	750
ther South America	53	52	51	55	50	50
Total Latin America	1,190	1,035	1,107	1,261	1,181	1,133
beans:						
anada	117	119	130	220	246	209
exico	60	135	160	121	270	260
razil	612	722	930	716	654	950
olombia	48	47	41	80	87	75
ther South America	36	34	56	39	36	62
Total Latin America	756	938	1,187	956	1,047	1,347
acco:						
anada	57	55	53	97	99	108
exico	24	23	35	47	46	62
aribbean	25	21	24	25	22	27
entral America	12	9	9	12	10	9
rgentina	59	59	54	63	62	52
razil	164	167	170	145	152	186
olombia	23	23	24	42	42	44
ther South America	31	30	32	38	43	46
Total Latin America	338	332	348	372	377	426

1/ Time reference is calendar year to include crop harvested mainly in year shown. Latin American totals include ailable data for the 22 Latin American countries, excluding Cuba. 2/ Seeded area for Canada; harvested area for ner countries insofar as possible.

Sources: Economic Research Service, USDA; and Foreign Agricultural Service, USDA.

Table 5.--Production of selected agricultural products by principal Western Hemisphere countries or regions, annual 1967-69 1/

Commodity by country	Production			Commodity by country	Production		
	1967	1968	1969		1967	1968	196
	1,000 tons				1,000 tons		
Cassava (yuca)				Cocoa beans			
Caribbean	286	288	298	Mexico	21	22	2
Central America	77	78	80	Dominican Republic	30	21	2
Brazil	27,268	29,203	30,000	Other Caribbean	10	9	1
Colombia	850	900	920	Central America	8	9	
Paraguay	1,543	1,504	1,560	Brazil	145	166	18
Other South America	1,585	1,599	1,656	Ecuador	70	53	6
Total Latin America	31,609	33,572	34,514	Venezuela	25	26	2
				Other South America	18	18	2
Sugar, cent. (raw value)				Total Latin America	327	324	36
Canada	135	135	126				
				Wool, shorn			
Mexico	2,430	2,286	2,014	Canada	2	2	
Dominican Republic	810	666	835				
Other Caribbean	710	746	687	Mexico	6	5	
Central America	643	637	687	Argentina 3/	194	180	18
Argentina	766	924	969	Uruguay	81	80	7
Brazil	4,465	4,358	4,580	Other South America	66	69	7
Colombia	636	671	700	Total Latin America	347	334	34
Peru	747	769	615				
Venezuela	372	354	384	Beef and veal			
Other South America	880	941	974	Canada	856	903	86
Total Latin America	12,459	12,352	12,445				
				Mexico	480	496	54
Cottonseed				Caribbean	53	56	5
Mexico	818	900	629	Central America	171	198	20
Caribbean	5	5	5	Argentina	2,522	2,546	2,70
Central America	375	364	294	Brazil	1,506	1,550	1,57
Brazil	1,015	1,060	1,250	Colombia	371	378	40
Peru	153	163	154	Uruguay	241	290	23
Other South America	360	393	306	Other South America	612	619	60
Total Latin America	2,726	2,885	2,638	Total Latin America	5,956	6,133	6,33
Bananas				Pork			
Mexico	986	995	1,024	Canada	536	536	49
Caribbean	762	710	718				
Costa Rica	784	1,064	1,200	Mexico	253	242	24
Honduras	1,195	1,255	1,100	Caribbean	26	28	2
Panama	600	650	700	Central America	44	47	4
Other Central America	132	182	187	Argentina	217	189	19
Brazil	8,056	8,435	9,000	Brazil	668	670	65
Ecuador 2/	2,500	2,500	2,500	Other South America	240	242	25
Other South America	2,305	2,416	2,485	Total Latin America	1,448	1,418	1,42
Total Latin America	17,320	18,207	18,914				
				Milk			
Coffee				Canada	8,303	8,378	8,41
Mexico	168	171	186				
Caribbean	72	66	70	Mexico	4,631	4,700	4,70
Central America	400	357	383	Caribbean	297	315	32
Brazil	1,380	990	1,140	Central America	1,108	1,160	1,20
Colombia	480	474	474	Argentina	4,366	4,682	4,71
Other South America	171	166	150	Brazil	6,904	7,235	7,52
Total Latin America	2,671	2,224	2,411	Chile	855	875	90
				Colombia	2,080	2,140	2,22
				Other South America	2,582	2,669	2,81
				Total Latin America	22,823	23,776	24,40

1/ Time reference is calendar year to include crop harvested mainly in year shown except that cocoa beans and coffee are harvests beginning in years shown. Latin American totals include available data for the 22 Latin American countries, excluding Cuba. 2/ Exportable-type only. 3/ Excludes wool exported on sheepskins.

Sources: Economic Research Service, USDA; and Foreign Agricultural Service, USDA.

ble 6.--Total agricultural exports and imports of selected Western Hemisphere countries, annual value, 1964-67

Country	Exports 1/				Imports 1/			
	1964	1965	1966	1967	1964	1965	1966	1967
	Million dollars				Million dollars			
nada	1,873.8	1,783.1	2,049.9	1,729.1	1,003.5	994.6	1,009.8	1,066.9
xico 2/	637.4	683.3	754.4	705.2	121.4	131.4	125.2	129.5
rbados	28.0	27.8	29.2	29.7	19.7	21.5	22.6	21.5
minican Republic	164.9	109.4	120.6	136.7	45.8	27.1	36.2	34.6
iti	26.5	24.5	3/27.9	3/27.0	6.8	8.9	3/8.6	3/9.0
maica	97.4	88.2	91.9	86.0	73.0	72.2	71.6	75.8
nidad & Tobago	41.2	36.8	35.2	40.1	55.5	58.3	59.9	57.4
Caribbean 4/	358.0	286.7	304.8	319.5	200.8	188.0	198.9	198.3
sta Rica	98.5	94.0	110.1	116.2	15.2	17.7	20.1	23.7
Salvador	147.8	152.2	141.4	140.0	29.0	33.3	37.1	33.7
temala	141.1	159.4	185.5	137.6	24.8	27.2	24.8	25.1
nduras	72.8	91.5	118.5	124.2	12.6	14.9	18.3	20.6
caragua	107.0	126.9	116.2	123.8	14.4	17.3	19.5	19.9
nama	34.0	43.9	51.1	60.3	22.2	21.6	22.5	22.3
Central America 4/	601.2	667.9	722.8	702.1	118.2	132.0	142.3	145.3
gentina	1,285.6	1,397.6	1,474.2	1,328.5	97.6	113.0	111.0	99.0
livia	3.1	4.6	3/5.4	3/6.4	27.1	27.3	3/34.2	3/37.8
azil	1,185.0	1,244.5	1,395.8	1,284.0	315.2	222.9	290.2	344.6
lle	59.7	37.4	64.6	50.9	168.9	146.8	175.5	159.3
lombia	429.8	401.2	383.0	389.4	65.9	56.9	94.1	48.0
uador	143.9	172.5	174.1	155.1	20.4	21.6	19.7	24.4
yana	51.8	46.1	50.5	53.0	16.7	13.4	13.9	21.2
raguay	36.7	42.5	33.2	35.9	6.8	6.8	6.7	9.4
ru	375.9	364.8	380.9	353.2	101.5	125.3	140.0	140.7
uguay	138.2	163.0	173.2	148.1	29.1	20.4	30.9	26.3
nezuela	27.4	30.7	34.7	42.4	176.2	179.3	148.2	183.3
South America 4/	3,737.1	3,904.9	4,169.6	3,846.9	1,025.4	933.7	1,064.4	1,094.0
Latin America 4/	5,333.7	5,542.8	5,951.6	5,573.7	1,465.8	1,385.1	1,530.8	1,567.1
Hemisphere 4/	7,207.5	7,325.9	8,001.5	7,302.8	2,469.3	2,379.7	2,540.6	2,634.0

1/ Standard international trade classification: categories for food, beverages, and agricultural raw materials, cluding fish, natural rubber, and waxes of forestry origin. 2/ Data differs from FAO due to re-evaluation of rtain exports, mainly cattle and cotton, and inclusion of free zone imports. 3/ Western Hemisphere Branch esti- te. 4/ For countries shown.

urces: FAO Trade Yearbook, country trade books, and official Government papers.

Table 7.--Exports and imports of selected agricultural commodities by principal Western Hemisphere countries or regions, annual 1967-69

Exports by country	1967 1/	1968 2/	1969 3/	Imports by country	1967 1/	1968 2/	1969 3/
	1,000 tons				1,000 tons		
Wheat: 4/				Wheat: 4/			
Canada	10,307	9,939	7,265	Jamaica	136	142	141
Mexico	212	5/	200	Trinidad & Tobago	90	64	110
Argentina	2,064	2,423	2,400	Dominican Republic	79	119	93
Other South America	13	-	94	Other Caribbean	153	156	163
Total Latin America	2,289	2,423	2,694	Central America	303	309	308
				Argentina	168	-	390
				Bolivia	171	172	130
				Brazil	2,453	2,600	2,362
				Chile	477	416	223
				Colombia	171	281	230
				Peru	491	631	670
				Uruguay	-	225	-
				Venezuela	699	765	800
				Other South America	219	227	212
				Total Latin America	5,610	6,107	5,832
Rice, milled:				Rice, milled:			
Mexico	-	44	42	Canada	41	43	40
Central America	17	30	30	Jamaica	27	34	27
Argentina	47	56	60	Trinidad & Tobago	30	27	26
Brazil	32	158	63	Other Caribbean	27	44	29
Guyana	102	96	90	Central America	27	28	41
Uruguay	35	19	49	Chile	9	14	59
Venezuela	63	33	30	Peru	68	75	97
Other South America	30	40	95	Other South America	20	20	20
Total Latin America	326	476	459	Total Latin America	208	242	299
Corn:				Corn:			
Mexico	1,254	896	788	Canada	740	783	715
Caribbean	-	1	-	Mexico	5	6	100
Central America	38	58	47	Jamaica	17	26	23
Argentina	4,318	2,893	4,062	Trinidad & Tobago	39	38	38
Brazil	430	1,238	652	Other Caribbean	17	17	14
Other South America	12	3	30	El Salvador	15	47	30
Total Latin America	6,052	5,089	5,579	Guatemala	12	20	5
				Other Central America	19	21	19
				Chile	37	85	245
				Peru	1	59	10
				Uruguay	9	101	-
				Venezuela	5/	121	150
				Other South America	2	3	3
				Total Latin America	173	544	637
Sugar, raw:				Sugar, raw:			
Mexico	550	641	610	Canada	890	860	895
Barbados	195	161	130	Caribbean	10	11	11
Dominican Republic	647	610	644	Central America	4	1	-
Jamaica	358	390	315	Chile	167	180	201
Trinidad & Tobago	163	199	180	Uruguay	47	42	46
Other Caribbean	244	242	248	Other South America	1	1	1
Central America	291	335	345	Total Latin America	229	235	259
Brazil	1,003	1,026	1,061				
Colombia	177	194	176				
Guyana	298	300	300				
Peru	483	460	272				
Other South America	180	314	246				
Total Latin America	4,589	4,872	4,527				
Coffee, green:				Coffee, green:			
Mexico	75	95	94	Canada	81	84	78
Caribbean	52	46	48	Caribbean	1	1	1
El Salvador	121	118	105	Argentina	33	31	32
Guatemala	81	85	98	Other South America	25	31	31
Other Central America	116	125	120	Total Latin America	59	63	64
Brazil	1,004	1,107	1,128				
Colombia	366	395	400				
Other South America	121	120	109				
Total Latin America	1,936	2,091	2,103				

Continued --

ble 7.--Continued

Exports by country	1967 1/	1968 2/	1969 3/	Imports by country	1967 1/	1968 2/	1969 3/
	1,000 tons				1,000 tons		
nanas, fresh:				Bananas, fresh:			
Mexico	7	12	5	Canada	182	194	194
Jamaica	191	155	160	Argentina	182	180	180
Other Caribbean	441	520	490	Chile	56	50	52
Costa Rica	371	554	625	Uruguay	21	16	18
Honduras	854	907	725	Other South America	5	5	5
Panama	454	474	552	Total Latin America	264	251	255
Other Central America	135	179	180				
Brazil	171	160	155				
Colombia	326	374	375				
Ecuador	1,263	1,251	1,250				
Other South America	38	36	37				
Total Latin America	4,251	4,622	4,554				
ocoa beans:				Cocoa beans:			
Mexico	6	1	5	Canada	18	17	16
Dominican Republic	24	25	25	Argentina	7	8	8
Other Caribbean	10	11	12	Colombia	11	11	10
Central America	7	5	5	Other South America	3	3	2
Brazil	114	76	120	Total Latin America	21	22	20
Ecuador	45	67	50				
Other South America	12	14	15				
Total Latin America	218	196	238				
eef and veal: 6/				Beef and veal: 6/			
Canada	20	30	28	Canada	29	26	65
Mexico	30	45	42	Caribbean	16	17	18
Caribbean	7	6	6	Chile	17	15	15
Nicaragua	20	24	17	Peru	18	17	18
Other Central America	36	44	33	Other South America	2	2	4
Argentina	697	574	760	Total Latin America	53	51	55
Brazil	25	60	98				
Paraguay	28	20	16				
Uruguay	55	106	110				
Other South America	3	5	5				
Total Latin America	901	884	1,087				
otton:				Cotton:			
Mexico	271	316	370	Canada	103	77	82
Guatemala	57	68	71	Caribbean	4	4	4
Nicaragua	110	98	95	Central America	-	1	2
Other Central America	47	32	36	Argentina	7	15	10
Brazil	189	250	430	Chile	32	27	32
Peru	68	67	88	Uruguay	7	6	7
Other South America	57	50	82	Other South America	4	9	11
Total Latin America	799	881	1,172	Total Latin America	54	62	66
obacco:				Tobacco:			
Canada	19	21	21	Canada	3	2	2
Mexico	8	4	8	Caribbean	2	2	2
Dominican Republic	19	15	20	Central America	2	2	2
Other Caribbean	5	5	5	Uruguay	4	3	3
Central America	2	2	2	Other South America	-	2	2
Brazil	45	39	50	Total Latin America	8	9	9
Colombia	12	15	15				
Paraguay	12	15	19				
Other South America	10	14	10				
Total Latin America	113	109	129				

1/ Revised. 2/ Preliminary. 3/ Estimated. 4/ Includes flour in wheat equivalent. 5/ Less than 500 tons.
6/ Carcass weight basis; excludes fats and offals.

Sources: Economic Research Service, USDA; Foreign Agricultural Service, USDA; U.N. Food and Agriculture Organization; and official Government reports.

Table 8.--International coffee agreement export quotas and U.S. sugar import quotas, selected years 1/

Country	Coffee agreement export quota			U.S. sugar import quota		
	1967/68	1968/69	1969/70 2/	1968 3/	1969 3/	1970 4/
	1,000 tons			1,000 tons		
Mexico	86.6	90.2	97.1	574	594	431
Dominican Republic	27.5	26.6	28.7	640	629	421
Haiti	26.6	25.1	27.1	30	16	23
Jamaica	0.7	1.5	1.7	5/	5/	5/
Trinidad & Tobago	4.3	4.1	5.2	5/	5/	5/
Caribbean	59.1	57.3	62.7	670	645	444
Costa Rica	56.0	56.4	60.8	66	68	50
El Salvador	96.8	97.4	104.8	41	42	31
Guatemala	87.3	92.3	99.4	56	58	42
Honduras	24.8	21.8	23.5	7	7	6
Nicaragua	28.3	28.2	30.4	50	65	50
Panama	1.4	1.5	1.9	34	40	31
Central America	294.6	297.6	320.8	254	280	209
Argentina	--	--	--	69	71	52
Bolivia	2.9	3.0	3.7	7	7	5
Brazil	1,060.3	1,072.8	1,155.5	561	581	421
Chile	--	--	--	--	--	--
Colombia	372.6	369.7	386.5	59	62	45
Ecuador	33.2	38.5	41.4	82	85	61
Guyana	--	--	--	--	--	--
Paraguay	--	4.2	4.8	--	--	--
Peru	37.0	37.9	40.9	448	272	336
Uruguay	--	--	--	--	--	--
Venezuela	28.0	16.7	18.0	28	29	21
South America	1,534.0	1,542.8	1,650.8	1,254	1,107	941
British Honduras	--	--	--	14	15	11
British Caribbean	--	--	--	197	215	149
French Caribbean	--	--	--	60	65	47
Other	--	--	--	271	295	207
Total Western Hemisphere	1,974.3	1,987.9	2,131.4	3,023	2,921	2,232
Total World	2,959.5	2,888.0	3,102.0	4,512	4,417	3,729
Hemisphere as percentage of world	66.7	68.8	68.7	67	66	60

1/ Coffee agreement years are beginning October 1; U.S. sugar import quotas are for calendar years. 2/ Includes adjustments through April 15. 3/ Total quotas and prorations. 4/ Initial quota and prorations through December 20, 1969. 5/ These countries share in quotas listed for the British Caribbean.

Table 9.--U.S. agricultural trade with Western Hemisphere countries and dependencies by value, average 1960-64 annual 1966-69

Country	U.S. exports					U.S. imports				
	Average 1960-64	1966	1967	1968	1969 1/	Average 1960-64	1966	1967	1968	1969 1/
	Million dollars					Million dollars				
nada 2/	420.9	485.7	485.0	484.0	509.2	180.0	240.2	201.1	226.2	244.1
xico	67.6	73.5	69.7	80.6	91.3	260.2	327.6	327.0	398.8	439.8
rbados	1.9	2.7	2.9	3.2	3.3	1.5	.6	2.8	1.4	1.3
minican Republic	13.3	21.4	22.1	30.2	24.7	109.6	116.4	116.4	139.2	148.2
iti	7.9	8.0	8.8	9.3	6.3	14.8	12.7	12.9	13.2	11.4
maica	13.5	22.3	25.3	29.1	29.5	14.7	17.5	18.8	18.0	13.3
inidad & Tobago	10.2	11.2	14.1	13.6	13.3	7.9	4.6	5.1	10.2	12.2
tilles (Neth.)	9.1	11.1	11.5	12.5	11.2	.1	.3	.1	3/	.1
hamas (Br.)	8.7	17.6	22.0	25.6	28.0	1.8	1.7	1.2	.2	2.2
rmuda (Br.)	5.5	7.0	6.9	7.7	7.3	.2	3/	.1	3/	3/
eward & Windward s. (Br.)	1.8	3.8	4.0	3.8	4.5	1.0	1.7	.9	1.1	.7
st Indies (Fr.)	.8	2.0	2.6	2.3	1.7	6.9	6.7	7.0	7.6	7.5
Caribbean	72.7	107.1	120.2	137.3	129.8	158.5	162.2	165.3	190.9	196.9
sta Rica	5.6	5.8	7.8	9.0	7.0	39.5	57.0	66.9	83.9	94.8
Salvador	6.8	9.3	7.8	8.4	9.6	34.3	37.9	47.4	39.1	34.4
atemala	10.0	12.8	14.1	14.8	10.4	57.6	76.8	59.7	65.8	70.2
nduras	4.1	5.8	5.9	7.0	5.5	29.3	76.3	59.4	69.9	73.8
caragua	4.5	8.2	6.5	6.2	5.5	25.1	24.1	33.4	40.3	42.6
nama	10.6	17.0	16.5	15.6	15.6	16.4	45.0	51.7	53.1	46.2
itish Honduras	2.0	2.4	2.4	2.5	2.2	1.7	2.1	3.6	3.6	4.3
nal Zone	.6	0	0	0	0	.1	3/	3/	.1	.1
Central America	44.2	61.3	61.0	63.5	55.8	204.0	319.2	322.1	355.8	366.4
gentina	3.7	4.4	2.9	3.7	11.9	95.0	109.0	101.3	127.6	105.8
livia	10.7	9.0	12.1	10.4	7.9	1.9	3.2	2.9	2.3	2.3
azil	100.0	101.2	109.7	88.1	68.5	481.1	483.7	461.2	564.1	499.5
ile	27.2	41.0	24.9	35.2	26.0	5.5	7.0	5.7	7.7	7.2
lombia	25.5	32.5	25.0	32.8	31.0	229.8	174.6	179.7	178.2	146.9
uador	7.9	11.8	11.1	12.5	11.1	62.9	82.7	85.9	75.9	64.3
yana	3.5	4.8	4.8	3.6	4.9	6.2	7.0	8.1	12.7	13.5
raguay	2.9	3.2	1.0	3.4	3.2	6.8	10.1	9.5	9.8	9.3
ru	24.4	37.2	42.2	22.1	15.0	78.3	77.1	82.1	96.3	67.0
uguay	7.7	2.2	2.5	19.9	2.5	15.8	22.9	8.1	14.1	8.9
nezuela	79.6	82.0	90.9	90.8	90.9	19.5	22.7	22.6	19.3	22.1
lkland Is. (Br.)	0	0	0	0	0	0	3/	0	0	0
ench Guiana	.1	.2	.2	.3	.1	.1	3/	3/	3/	3/
rinam	2.5	3.6	3.7	4.1	4.0	1.0	.7	1.0	.5	.4
South America	295.7	333.1	331.0	326.9	277.0	1,003.9	1,000.7	968.1	1,108.5	947.2
tal Latin America	480.2	575.0	581.9	608.3	553.9	1,626.6	1,809.7	1,782.5	2,054.0	1,950.3
tal W. Hemisphere	901.8	1,060.7	1,066.9	1,092.3	1,063.1	1,806.6	2,049.9	1,983.6	2,280.2	2,194.4
tal World	5,363.5	6,879.0	6,383.3	6,228.0	5,935.4	3,896.8	4,491.6	4,454.4	5,028.4	4,954.2
misphere as percentage of world total	17	15	17	18	18	46	46	45	45	44

1/ Preliminary. 2/ Excludes export transshipments, mostly grains and oilseeds to Western Europe. 3/ Less than 50,000.

ource: U.S. Bureau of the Census.

Table 10.--U.S. agricultural exports to the Weste

Country or region 1/	Live animals	Meat and preparations	Dairy products and eggs	Cereals and preparations	Fruits, vegetables and preparations	Feeds 2/	Miscellaneous food preparations 3/
	Million dollars						
Canada							
1965	5.9	19.3	6.5	31.8	184.7	25.1	10.5
1966	8.6	25.1	8.9	53.5	197.4	26.7	11.4
1967	14.9	26.2	8.4	54.1	196.5	25.5	10.2
1968	9.9	27.1	8.8	58.8	207.8	28.6	9.5
1969	10.9	41.0	9.2	55.8	222.4	35.6	10.7
Mexico							
1965	8.7	2.9	7.1	16.9	8.5	6.5	4.5
1966	8.0	3.0	5.1	9.2	10.4	6.5	5.2
1967	10.3	3.4	6.7	3.6	8.8	5.7	4.9
1968	9.5	4.3	7.7	8.4	9.9	3.3	6.2
1969	9.5	4.8	7.5	7.5	10.6	3.9	9.1
Caribbean							
1965	1.6	15.0	6.2	32.0	11.1	8.5	6.2
1966	1.5	18.1	5.8	30.7	12.9	10.2	7.8
1967	1.6	20.6	6.3	37.0	12.2	11.6	8.3
1968	1.5	23.8	9.1	40.1	13.6	14.6	9.6
1969	1.8	26.1	8.7	35.1	14.3	12.1	9.3
Central America							
1965	3.5	1.9	4.3	18.2	5.0	4.2	3.9
1966	1.9	2.0	3.6	24.6	5.8	3.8	4.6
1967	1.9	1.9	4.4	24.6	5.8	3.9	4.5
1968	1.9	2.0	5.8	26.8	5.3	3.1	5.8
1969	2.0	2.1	5.0	21.8	5.6	2.3	5.6
Andes Region							
1965	4.4	3.9	19.7	83.5	17.1	1.9	7.4
1966	3.4	3.6	9.1	117.8	21.5	2.0	7.3
1967	4.3	2.1	11.5	112.8	19.4	2.2	8.9
1968	3.9	1.0	18.7	105.6	17.3	1.9	12.3
1969	5.3	0.6	13.7	88.6	15.2	1.4	12.9
Other South America							
1965	1.2	0.9	14.2	38.7	3.2	1.2	1.0
1966	1.2	1.4	8.4	87.7	4.7	1.9	1.3
1967	0.9	1.2	12.4	87.3	5.9	1.7	3.6
1968	1.4	1.1	11.6	89.5	5.5	1.7	3.0
1969	1.7	1.1	6.1	66.6	5.7	1.7	3.3
Latin America							
1965	19.4	24.6	51.5	189.3	44.9	22.3	23.0
1966	16.0	28.1	32.0	270.0	55.3	24.5	26.2
1967	19.0	29.2	41.3	265.2	52.1	25.1	30.2
1968	18.2	32.2	52.9	270.4	51.7	24.6	36.9
1969	20.3	34.7	41.0	219.6	51.4	21.4	40.2
Western Hemisphere							
1965	25.3	43.9	57.0	221.1	229.6	47.4	33.5
1966	24.6	53.2	40.9	323.5	252.7	51.2	37.6
1967	33.9	55.4	49.7	319.3	248.6	50.6	40.4
1968	28.1	59.3	61.7	329.2	259.5	53.2	46.4
1969	31.2	75.7	50.2	275.4	273.8	57.0	50.9

1/ Exports to territories associated with foreign countries are included in region totals; Andes region includes Bolivia, Chile, Colombia, Ecuador, Peru and Venezuela. 2/ Prepared animal feeds, grain byproducts and oilseed meals. 3/ Includes lard, vegetable shortening, sauces, soups, and flavoring extracts. 4/ Principally cotton. 5/ Less than $50,000.

Source: U.S. Bureau of the Census.

isphere, principal export categories, 1965-69

Tobacco	Hides and skins	Oilseeds	Fibers 4/	Animal fats and oils	Vegetable fats and oils	Other	Total
			Million dollars				
4.7	8.6	40.2	50.1	2.8	17.1	36.1	443.4
3.6	15.6	47.4	31.6	2.9	14.8	38.2	485.7
4.2	10.3	49.6	34.3	1.9	9.1	39.8	485.0
4.0	11.6	49.8	14.4	1.3	8.6	43.8	484.0
2.6	13.3	38.7	16.8	2.1	10.7	39.4	509.2
3.9	9.2	1.3	0.8	0.5	7.5	8.5	86.8
2.4	8.5	3.8	0.7	0.6	2.3	7.8	73.5
5/	13.3	1.4	0.6	0.4	0.7	9.9	69.7
0.5	13.9	1.5	0.5	1.0	1.9	12.0	80.6
5/	15.7	3.6	0.6	3.7	2.9	11.9	91.3
2.2	5/	5/	0.7	2.3	9.3	5.0	100.1
2.1	5/	0.9	1.1	2.6	8.0	5.4	107.1
3.0	5/	3.0	0.9	2.3	7.2	6.2	120.2
3.5	5/	1.3	0.7	2.3	9.9	7.3	137.3
2.6	5/	0.2	0.5	2.9	8.1	8.1	129.8
1.3	0.2	0.7	5/	3.6	2.8	4.4	54.0
0.8	5/	0.6	0.1	4.0	4.1	5.4	61.3
1.2	0.1	0.5	5/	4.4	3.1	4.7	61.0
1.1	0.1	0.3	5/	4.7	1.9	4.7	63.5
0.7	0.1	0.6	0.2	4.2	1.4	4.2	55.8
2.9	0.9	3.5	9.3	6.4	19.0	11.8	191.7
3.6	0.9	4.7	2.1	7.2	16.0	14.1	213.5
5.0	0.5	4.3	0.6	6.4	14.0	14.2	206.2
2.4	0.5	4.9	0.1	7.2	17.0	11.0	203.8
3.0	0.4	4.6	0.2	6.9	18.8	10.3	181.9
0.9	0.1	0.1	0.1	0.3	11.8	3.5	77.2
1.5	5/	0.1	0.1	0.3	5.9	5.2	119.6
1.6	5/	5/	5/	0.1	6.1	4.0	124.8
1.3	5/	0.1	0.1	0.1	2.5	5.2	123.1
1.6	5/	0.1	5/	0.1	2.1	5.0	95.1
11.2	10.4	5.6	10.9	13.1	50.4	33.2	509.8
10.4	9.4	10.1	4.1	14.7	36.3	37.9	575.0
10.8	13.9	9.2	2.1	13.6	31.1	39.1	581.9
8.8	14.5	8.1	1.4	15.3	33.2	40.1	608.3
7.9	16.2	9.1	1.5	17.8	33.3	39.5	553.9
15.9	19.0	45.8	61.0	15.9	67.5	69.3	953.2
14.0	25.0	57.5	35.7	17.6	51.1	76.1	1,060.7
15.0	24.2	58.8	36.4	15.5	40.2	78.9	1,066.9
12.8	26.1	57.9	15.8	16.6	41.8	83.9	1,092.3
10.5	29.5	47.8	18.3	19.9	44.0	78.9	1,063.1

U.S. Department of Agriculture
Washington, D.C. 20250

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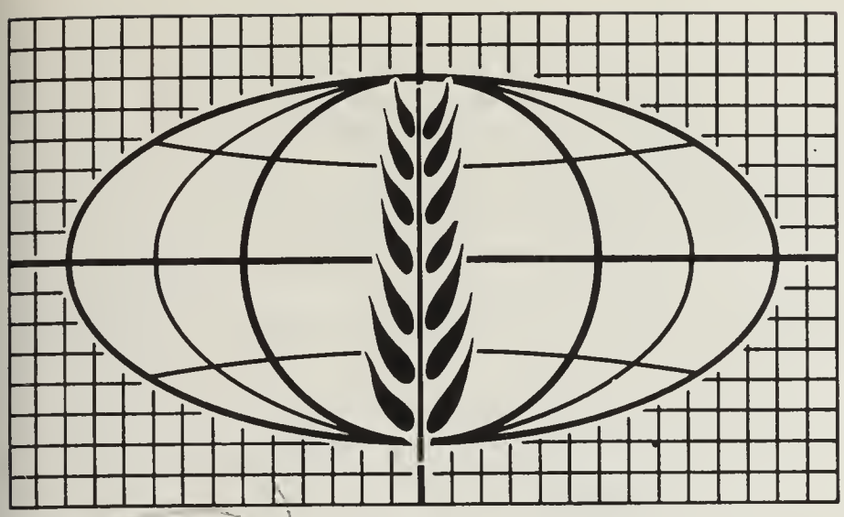

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THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA

Review of 1969 and Outlook for 1970

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

ABSTRACT: Agricultural output in the Far East gained again in 1969 and stood above the trend value. Good increases occurred in South Asia, Korea, Thailand, Malaysia, and the Philippines. Serious drought in Australia brought a sharp decline in wheat production, but output of livestock products did well. Except for Indonesia, most rice importing countries of the region had good harvests and will not need to expand imports in 1970. The region imported less wheat and rice but somewhat more corn and sorghum in 1969. U.S. agricultural exports to the Far East dropped in 1969, mainly because wheat shipments to India and Pakistan under P.L. 480 were reduced.

FOREWORD

This annual publication of the U.S. Department of Agriculture provides an analyti- basis for shortrun policy decisions and informs an interested public about current icultural developments in the Far East and Oceania. It is one of five regional sup- ments to The World Agricultural Situation; Review of 1969 and Outlook for 1970, R 57. Other regional reports are being published for Western Europe, The Communist as, Africa and the Middle East, and the Western Hemisphere.

Statistical information relating to production and trade of agricultural products the region will appear in a separate publication, The Far East and Oceania Agricul- al Data Book, to be released in July.

Riley H. Kirby, Leader, Situation and Outlook Section, directed and coordinated report. Others participating in the preparation of the report include Goodloe ry, Boyd A. Chugg, Charles E. Goode, Nancy Hancock, Mary E. Long, John B. Parker, , Virginia Salley, and Shirley R. Simpson.

U.S. Agricultural Attaches in several countries provided background material for s report through periodic situation and commodity reports.

Clarence E. Pike

Clarence E. Pike, Chief
Far East Branch
Foreign Regional Analysis Division

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Washington, D. C. May 1970

SUMMARY

Agricultural output in the Far East in 1969 rose 4.5 percent above the previous ear and stood above the trend value by a like amount. Much of the gain is traceable India, partly because that country comprises about half the production of the re- on. Increases in Pakistan, Korea, Thailand, Malaysia, and the Philippines also con- ibuted heavily. Production in Japan declined slightly from 1968 and was below the end for 1969. In Vietnam production rose well above the previous year but still was percent below trend.

India accounted for a more than proportionate share of the regional increase be- use that country achieved a rate of gain above the regional average. Wheat, the llets, sugarcane, jute, and peanuts did especially well there. Barley and gram de- ined. Pakistan accounted for 9 percent of the regional increase, about in proportion its share of total production.

The Republic of Korea accounted for one-eighth of the overall gain, far beyond its ual share of output. This reflected a large increase in Korea's rice crop, in part recovery from the effects of drought in the 2 preceding years and in part a general crease, which carried total production for the country 6 percent above the trend.

In Thailand production of rice, corn, kenaf, rubber, and peanuts made good ad- nces.. Rice in Malaysia rose 25 percent; rubber and palm oil also did well there.

Rice production in the Far East totaled 162 million tons 1/ in 1969, up about 4 ercent. Except for Indonesia, most rice importing countries had good harvests and ill not need to expand imports in 1970. Thailand and Japan will strive to expand heir rice exports. Pakistan will try to move out more basmati rice and in turn im- ort more of cheaper rice varieties.

Wheat and other grains except barley made good harvests in 1969. So did cotton, ute, sugarcane, rubber, and palm oil. The tobacco crop was down in several countries, nd copra was essentially unchanged from 1968.

Countries of the Far East imported 26.3 million tons of all grains in 1969, down bout 7 percent from 1968. Imports of wheat and flour fell to 12.2 million tons; India nd Pakistan together took nearly 2.9 million tons less, but Japan, Korea, and Taiwan ook somewhat more. Imports of rice fell slightly as the deficit countries had good arvests a year ago. Imports of corn and sorghum gained about 10 percent, mostly in upport of the Japanese livestock industry.

U.S. exports of grain to the Far East totaled 14.7 million tons in 1969, down rom 17 million a year earlier. This was 45 percent of all U.S. grain exports. It as 56 percent of the total imports of grain into the Far East in 1969--a slightly maller share than obtained the previous year. A cutback in P.L. 480 shipments of heat to India and Pakistan overshadowed U.S. gains in corn and sorghum to Japan and n wheat, rice, and corn to Korea.

mports of all grains by the Far East countries this year may be up 2.5 million tons ver 1969. More than half of this import gain may come in wheat (mainly into Pakistan ith more moderate increases for India, Japan, and Korea) while the remainder is seen s a gain in corn (mostly in the Japanese market). Rice imports for the region are

1/ Tonnages in this report are metric.

not expected to change much from 1969. The United States exported nearly 1.3 million tons of rice to the Far East in 1969. Our shipments to that area may be somewhat less in 1970 because of slightly smaller U.S. supplies for export this year, while the traditional exporting countries have even larger quantities available than last year.

Total merchandise imports by the Far Eastern countries rose 10 percent in 1969, reaching an estimated $31.6 billion. The unfavorable trade balance improved for the second year in a row. Food, beverages, and agricultural raw materials accounted for about 30 percent of the imports; fibers and cereals were the leading items.

U.S. exports of farm products to the Far East fell to $2 billion in 1969, off $200 million from 1968. The largest declines occurred in India and Pakistan as P.L. 480 shipments were cut back. Our exports to both countries combined fell $170 million as U.S. wheat shipments tumbled to $136 million, less than half the previous year.

U.S. exports to South Vietnam, the Philippines, and Hong Kong dropped about $20 million each. A sharp reduction in rice shipments to South Vietnam overshadowed respectable gains in exports of dairy products, corn, flour, tobacco, cotton, and soybean oil. A serious loss occurred in shipments of cotton to Hong Kong as the textile industry there looked for cheaper growths and made increasing use of synthetics. A drop in U.S. exports of rice to Hong Kong was matched by larger takings of fruits and vegetables, especially fresh oranges. In trade with the Philippines, U.S. exports of wheat and cotton fell sharply. A smaller decline in nonfat dry milk was matched by a gain in tobacco.

U.S. agricultural exports to South Korea rose more than 50 percent to $235 million in 1969. Most of the gain was in exports of rice. Smaller increases were shown for wheat, flour, corn, and cotton. No other country showed a significant gain in 1969. Japan, the leading commercial market for U.S. farm products, showed no change from the $933 million level of the previous year.

There were gains in U.S. exports of several products to the Far East including rice, corn, and cattle hides. These were not sufficient, however, to offset sharp losses in wheat and cotton as well as smaller declines in sorghum and soybeans.

Exports of all commodities from Far Eastern countries were an estimated $28 billion in 1969--up 16 percent from the year before. In recent years, about 30 percent of total exports have consisted of food, beverages, and agricultural raw materials. Rubber, tea, rice, sugar, silk, jute, and coconut products are important agricultural items exported.

The United States provides a market for about one-fourth of the region's total exports. Total U.S. imports from the Far East in 1969 were worth $7.9 billion, up 21 percent from 1968. Three-fifths of the total came from Japan, and imports from that country are 90 percent non-agricultural. Agricultural imports from the region rose 4 percent to $806 million.

The largest gain was in imports of rubber, which increased in quantity as well as unit value. Rubber from Malaysia rose 77 percent to a value of $137 million. Singapore, Indonesia, and Thailand also moved more rubber to the United States.

Imports from the Philippines, leading supplier in the Far East, declined 10 percent to $285 million. A sharp cutback in copra and coconut oil reflected the effects of dry weather on output of coconuts. This far overbalanced the 9 percent rise in imports of sugar from the Philippines. Imports from India were off $12 million. The biggest loser was cashew nuts, but tea and sugar were down too.

Agricultural production in Australia declined about 3 percent in 1969/70. Although the wheat crop fell one-fourth below the previous year because of serious drought, it was still the third highest on record. Corn, sorghum, and sugar crops were also down. Meat production was up, and meat exports are expected to rise in 1970. Meat exports may reach 6 million tons. Drought in New Zealand, the worst in many years, held down crop production for 1970. Milk production was unchanged in 1969 but has slumped in 1970 as a result of poor pasture conditions.

THE AGRICULTURAL SITUATION IN THE FAR EAST AND OCEANIA

Review of 1969 and Outlook for 1970

AUSTRALIA

Australia's agricultural production declined about 3 percent in 1969/70. The wheat crop was about 25 percent below the record 14.8 million tons produced the preceding season. Wheat stocks have increased in the past 4 years and will top the 9-million ton level by the end of 1970 unless exports exceed the average of the past 5 years. Smaller crops of corn, sorghum, and sugarcane resulted from dry weather in northern New South Wales and parts of Queensland. Meat production moved up slightly. Good foreign demand and high export prices prevailing for beef, mutton, and lamb should result in substantial meat exports again during 1970, particularly to the United States.

Gross national product (GNP) for the year ending June 30, 1970, is forecast at $2.2 billion or 6 percent above 1968/69. Agriculture's share will probably be about 7 percent. Despite price declines in wool, and assuming wheat shipments increase, exports of farm products in 1969/70 will total about $2.2 billion or the highest since 1966/67.

As of December 1, 1969, wheat carryover stocks totaled a record 7.1 million tons. Preharvest estimates pegged the 1969/70 wheat crop at 465-500 million bushels. This range was reduced sharply to about 400 million bushels when harvesting ended in January. The lower estimate--about three-fourths of the record output in 1968/69--reflected varied adverse weather throughout the wheat areas. Still the crop is exceeded only by those of 1966/67 and 1968/69. Drought in Queensland and Western Australia and late rains and frosts in New South Wales affected not only yields but also the quality of grain produced. If exports in the 1969/70 marketing year ending November 30 do not exceed 5.9 million tons, December 1 stocks could increase to 9.3 million tons (table 1).

A quota delivery system was adopted by the government and industry for both the 1969/70 and 1970/71 wheat crops. Advance payments of $.123 per bushel for the 1969/70 crop were limited to deliveries of 357 million bushels to the Wheat Board. A guaranteed price of $1.62 per bushel applied to the first 200 million bushels of wheat exported. The marketing quota for the 1970/71 crop has been officially announced at 318 million bushels. The $1.23-per-bushel prepayment rate will also apply to 1970/71 crop deliveries.

The quota system, the first real attempt of the wheat industry and the government to control production, caused much dissension among farmers. When wheat exports increased during late 1969 and wheat deliveries from the 1969/70 crop were less than originally forecast, the Wheat Board accepted overquota wheat deliveries but charged

Table 1.--Australia: Supply and distribution of wheat, 1967-70

Item	1966/67	1967/68	1968/69	1969/70
	1,000 tons			
December 1 opening stocks (including flour as wheat)	449	2,191	1,410	7,076
Production	12,699	7,547	14,804	10,995
Total supplies	13,148	9,738	16,214	13,071
Exports (Dec.-Nov.)	8,600	5,658	6,804	5,871
Domestic consumption	2,357	2,670	2,334	2,900
November 30 closing stocks	2,191	1,410	7,076	9,300

them against farmers' 1970/71 allotments. No advance payments are being made for over quota deliveries except for such readily salable types as hard wheat or low-protein soft wheat.

In another move the government revised the fifth wheat stablization plan adopted in 1969 by reducing the home consumption price of wheat from $1.93 to $1.61 per bushel. Regardless of this price adjustment, offgrade wheat has sold in interstate transaction outside the Wheat Board at about 80 cents per bushel. Such sales tended to depress the prices of corn, barley, and oats to the lowest levels in many years.

The 1969/70 rice crop, harvested from March to May, is forecast at 303,000 tons c about 19 percent above the 1968/69 harvest. The area planted to rice had been increased about 18 percent.

Milled rice exports in 1968/69 increased 8 percent. An even larger increase of 13 percent is forecast for 1969/70. Papua and New Guinea take about 30 percent of Australia's rice exports; other important outlets in 1968/69 were the United Kingdom and Okinawa. In 1969/70 commercial and aid shipments of rice are being made to Indonesia.

Barley production in 1969/70 is estimated at 1.8 million tons, up 20 percent. In 1968/69, barley exports, mainly to the United Kingdom and Japan, totaled 451,000 tons--3½ times the year-earlier level. Oat production is down slightly from the 1.7 million tons harvested in 1968/69. Exports of oats in 1968/69 were 80 percent above the previous year and are expected to remain at the 327,000-ton level in 1969/70.

Corn and sorghum production is down sharply in 1969/70 due primarily to the drou conditions in northern New South Wales and parts of Queensland. Sorghum output is estimated at 220,000 tons. This is 50 percent of the 1968/69 crop--and the smallest harvest since 1960/61. Improved moisture conditions in November encouraged farmers t plant summer crops of sorghum and oilseeds in areas where regular wheat and coarse grain crops failed.

Production of cotton continues to increase, and the 1969/70 crop should approximate 37,000 tons. Australia's imports have declined dramatically in the last 3 years and are forecast at about 5,000 tons in 1969/70. Its imports from the United States alone in the early 1960's averaged 12,000 tons. Exports of Australian cotton for 1969/70 are forecast at 7,000 tons--up from 1,000 tons in 1967/68 (table 2). The cott industry annually absorbs about 29,000 tons of raw material. This includes 3,000 tons of long-staple cotton which is not produced in Australia and must be imported.

The 1969/70 tobacco crop is reported at 34 million pounds (dried weight) or just under the record crop produced in 1963/64. Production is so much above the domestic

Table 2.--Australia: Cotton production and trade, 1960-64 average and annual 1965-69 1/

Item	1960-64 average	1965	1966	1967	1968	1969 2/
	1,000 tons					
roduction ...	4	20	17	32	34	37
mports	25	15	9	12	6	5
xports	--	--	1	1	4	7

1/ Years beginning July 1.
2/ Estimates.

arketing quota of 28.5 million pounds set early in the season, that the government ised the quota to 31.5 million pounds. Even with this higher marketing quota about million pounds were marketed at a special sale in Brisbane and charged against the 70/71 season. The marketing quota for the 1970/71 crop has been increased to 34.7 illion pounds. This probably will provide an additional incentive to farmers to in- ease production next year. Prospects for U.S. tobacco exports to Australia are not oo bright, particularly since the quality of Victoria's leaf is improving.

The 1969/70 dried fruit pack is estimated at 81,000 tons--up about 53 percent rom the previous year. Australia experienced difficulties in marketing its mall pack in 1968/69 under provisions of the International Sultana Agreement and aced some stiff competition from Middle East producers for the U.K. and West European arkets.

The 1969/70 cane crop of 15.5 million tons is down 17 percent from last year be- ause of the drought in Queensland. Raw sugar production likely will fall to 2.1 mil- lon tons. Exports will decline to 1.4 million tons or 30 percent below the volume hipped in 1968/69. Even so, Australia will maintain its quota shipments of 178,000 ons to the United States as well as shipments to such traditional markets as United ingdom, Japan, and New Zealand.

Total meat production in 1969/70 is forecast at 1.9 million tons--up 10 percent rom 1968/69. Large quantities of frozen beef and veal were stockpiled in early 1970 s the result of forced slaughter in Queensland drought areas. Should heavy rains revail in northern areas, slaughtering may decline because of the demand for cattle o restock pastures.

Beef cattle and sheep numbers are expected to increase about 5 percent in 1970. airy cattle will decline due to the continued shift from dairying to beef cattle roduction in some areas. Beef and veal production could increase about 7 percent ue to heavier slaughtering weights, compared with 1969. Lamb slaughter will in- rease in 1970 stimulated by a strong demand for lamb in the U.S. market.

Of the overall 1970 U.S. meat import program, Australia's share of the 1,061-mil- ion-pound allocation is roughly 50 percent. Its meat shipments under quota are ex- ected to total $246 million in 1970, compared with $235 million in 1969. This is ainly comprised of beef. Lamb shipments to the United States are not subject to uota limitations.

Wool production in 1969/70 probably will rise by 4 percent to 2,023 million ounds. Prices of wool declined in the last 6 months of 1969 to average 45 cents per ound against 52 cents per pound a year earlier. Prices are particularly depressed or merino wools. Total wool sales in late 1969 were up 8 percent above 1968.

Indications are that dairy production in 1969/70 will increase in all categories but cheese. The estimate for dried milk output is 156,000 tons or 15 percent more than in 1968/69.

The government continues to encourage agricultural production for export by payin exporters for their losses from the British pound devaluation in late 1967. Other incentives include increased subsidy payments to farmers using superphosphate and nitrogenous fertilizers, tax concessions on all structural improvements for water, fodder, and grain conservation, and grants and loans for drought relief.

New duties were announced late in 1969 by the Minister of Trade and Industry. They apply to imports of peanuts, soybeans, rapeseed, linseed, sunflower seed, safflower seed, cotton seed, and corn oil. This action was designed to protect farmers who might divert land from wheat to oil seed crops.

Australia will continue to promote export programs for grains, dairy products, fruits, and meats--particularly to such profitable markets as Singapore, Hong Kong, and Thailand. (Mary E. Long)

BURMA

Production of rice, Burma's most important crop, reached 8 million tons in 1969. Rice exports rose to 550,000 tons and may equal this level in 1970. Among the secondary crops pulses, peanuts, cotton, and jute showed increases last year while sugar, tobacco, vegetables, and fruit decreased.

Per capita GNP (deflated) has risen 1.5 percent per year since 1962 and reached $80 in 1969. Agriculture's share of the total national product remained at 35 percent. About 80 percent of the Burmese population is engaged in agriculture.

The economic policies of the government include nationalization of domestic businesses, especially those owned by foreigners, and prohibition of private foreign investment in Burma. They also provide for an expansion of the role of cooperatives, including producer, consumer, and credit co-ops. Co-ops are scheduled to replace some private and state trading activities.

Burma's foreign trade decreased sharply during 1960-68 following losses in its largest export, rice. These trends were reversed in 1969, but total imports continued to decline. Imports of consumer goods decreased drastically over the last decade but imports of capital goods remained almost stable. The International Monetary Fund has extended balance-of-payments support to Burma because of declines in its exports and foreign exchange reserves. The loan will enable Burma to cut down on short-term, high cost loans to finance the imbalance.

Rice production first reached 8 million tons in 1962, and Burma has not been able to maintain increases above this level in the decade of the sixties. Area under production has varied but has not increased in this period either. Area planted in new rice varieties rose from 160,000 hectares in 1968 to 200,000 hectares in 1969. This was about 4 percent of the area planted in rice. The yields of new varieties in Burma are approximately double those of conventional varieties. New varieties are produced for domestic marketing in rice deficit areas rather than for export. Under present policies, they are a profitable crop for farmers. The government pays the same price for these varieties as for the popular ngasein rice.

Since rice is the staple food item, the government has kept its price low for consumers. Government sales on the domestic market are priced to cover costs, while export sales reflect substantial profits. The farmer has three legal outlets for his rice; it can be used for home consumption, sold within his township, and sold to the

ernment. Around urban centers some rice moves outside official channels. It is ally of high quality and thus commands a higher price.

For several years Burma has had short supplies of rice for export, mainly because ernment policies held procurement prices low and discouraged production. Govern- t procurement in 1969 of the previous year's crop approximated 40 percent of total e production, compared with only 33 percent in 1968. Procurement in 1969 was higher ause the crop was better and because the government offered incentive programs using sumer goods in barter. Also, enforcement against illegal sales may have been icter. The government accumulated an exportable surplus of around 900,000 tons of e in 1969. It was able to export approximately 550,000 tons of this, well above the 8 exports of 352,000 tons. Exports could rise moderately in 1970 if procurements tinue at their present rate.

Production of pulses increased to 300,000 tons in 1969 and corn reached 90,000 s. Exports of each, falling since the early 1960's, may rise in 1970. Cotton pro- tion has been disappointing. Exports of cotton have virtually ceased, as production l off from the early 1960's and domestic production of yarn has consumed more of local crop. Rubber production has been stable over the past 6 years at 12,000 s. Rubber exports recovered to 13,000 tons in 1968/69 from a low 4,000 tons 2 rs earlier.

United States agricultural trade with Burma is negligible. U.S. agricultural ex- ts amounted to $374,000 in 1969; this consisted mostly of nonfat dry milk. Total S. exports to Burma were valued at about $10 million in 1969.

In 1969, Burmese farmers doubled their usage of fertilizer to 140,000 tons. h of the increase was associated with the production of new rice varieties. The ted States shipped 58,000 tons of fertilizer to Burma in 1968 but sold none to that ntry in 1969. A new fertilizer plant opened in Burma in 1969, another will open is year. They will have a combined capacity of over 120,000 tons of urea a year.

CEYLON

Economic conditions are improving in Ceylon. Government policies are contributing expansion in agricultural production, industry, trade, and tourism. Floods in De- mber left many villagers homeless in southern and eastern Ceylon. However, the luge will benefit the maha rice crop harvested in the spring. The major export ops, tea and rubber in the hills and coconuts along the western and northern coast, caped flood damage. Rice and wheat flour are being imported to replenish supplies stroyed by the floods.

Ceylon's foreign exchange earnings slipped slightly in 1969. Wheat flour and ce were imported largely from sources not requiring an immediate payment in convert- le currency. Low tea prices and a surging demand for imported manufactures have d the government to intensify its efforts to find new sources of foreign exchange. 55-percent bonus is now given in rupees to tourists when converting their money in ylon's hotels and banks. Foreign investment is encouraged, and planners are opti- stic over ventures to expand tourist facilities and factories.

Ceylon's GNP increased about 5 percent in 1969 and reached $2 billion for the rst time. Impressive growth was made during 1969 in industrial plant capacity, urism, and subsidiary food crop production. Business activity was brisk late in the ar, after credit restrictions were eased in June.

Total rice production nudged up by 1 percent in 1969 to 1.4 million tons of ddy. This was still 43 percent higher than the turnout in 1966, when rice imports

peaked. The maha spring harvest was 8 percent higher than a year earlier. The smaller yala crop harvested later in the year was down 12 percent because of dry weather during the growing season. In 1969, improved rice varieties were planted in over half the paddy fields.

The major success of the Grow More Food campaign in 1967 and 1968 was in rice. In 1969 striking achievements were made in other food crops. Potato production double in 1969 and the harvest of chillies during the maha season was much greater than during the previous year. The government has programs to reduce imports of potatoes, chillies, and onions by increasing production of these crops.

Corn production increased from 10,000 tons in 1966 to 23,000 tons in 1969. The area planted to corn increased in the Badulla area and in the irrigated area of the Walawe scheme. The output of poultry feed almost doubled in 1969, and corn was a major ingredient.

Production of tea fell about 2 percent in 1969. Growers recorded smaller profits because of reduced tea prices and rising labor costs.

Rubber production increased slightly to 150,000 tons in 1969. Higher yields from improved new varieties of rubber caused the rise. About half of the area in rubber has been replanted with high yielding varieties since 1954. Their yields after 8 years are almost double those of older trees.

Coconut production has declined slightly in recent years because of adverse weather and little enthusiasm for planting new trees. New projects like the Katunayak Airport and some factories near Colombo have been built in prime coconut-producing areas, and consequently many trees were cut down.

Volume of Ceylon's tea exports in the first 9 months of 1969 was up 4.5 percent from the comparable period of 1968, but lower prices caused a decline in value of 1 percent. Exports to the United Kingdom rose during the year as shipments from India to that market declined. Prices for low-grown teas declined gradually in late 1969. The average export price for Ceylonese tea declined from 93.5 cents per kilogram in 1968 to about 83.5 cents in the first 9 months of 1969. Exports of tea to the United States, Australia, South Africa and some other important markets in 1969 were slightly higher than in 1968.

Export volume of natural rubber in 1969 approximated the 149,000 tons shipped in 1968, but higher prices caused the value to rise by over 30 percent. Under the rubber-for-rice trade agreement, Ceylon sends enough rubber to mainland China to obtain 200,000 tons of rice. Other important and steady markets for Ceylon's rubber the last 5 years include the United States, Canada, Japan, and West Germany. Exports of rubber to the USSR and Poland have declined by about 50 percent since 1964.

Exports of coconut oil in the first 9 months of 1969 were 10 percent off the year-earlier pace, and exports of copra were down 9 percent. Exports of desiccated coconuts in the first 9 months of 1969 were running 21 percent below 1968 levels. The decline in coconut production and higher transportation costs to Western Europe contributed to the decline.

Imports of wheat flour in 1969 were down about 7 percent from the 429,000 tons required a year earlier, but imports from the United States rose. In 1970 imports of wheat flour likely will exceed 400,000 tons, with about half the supply coming from the United States. Imports of wheat from Australia and the United States are increasing for use in the new flour mill and may reach 70,000 tons in 1970.

Imports of rice declined from 370,000 tons in 1968 to about 300,000 tons in 1969 l likely will remain at this level in 1970. Arrivals of rice from Burma and Thai- ıd declined sharply in 1969. The Food Commissioner was reluctant to import rice tended for free distribution to ration cardholders from sources requiring payment convertible currency. Ceylon imported about 15,000 tons of IR-8 rice from West kistan in exchange for tea, and further imports from that source are likely in 1970.

U.S. agricultural exports to Ceylon declined from $18.8 million in 1968 to $13.5 llion in 1969. Wheat flour accounted for over 95 percent of each value and fell om 215,000 tons to 138,000 tons. U.S. agricultural imports from Ceylon in 1969 re about the same as the $27.8 million recorded in 1968. The major imports were tea lued at $20.3 million and rubber worth $4.3 million. (John B. Parker, Jr.)

HONG KONG

The Crown Colony's economy continued to expand in 1969, with exports, imports, urism, and textile industries showing strong gains. For 1969, GNP likely exceeded e $2.7 billion registered in 1968 and per capita income surpassed the $611 level.

The Colony took more rice and corn from abroad in 1969, but less raw cotton, eat, and wheat flour. U.S. exports of rice, raw cotton, and soybeans to Hong Kong clined in 1969, but our exports of fresh oranges, various fruit products, and frozen ultry increased sharply.

The textile industry continues to expand and modernize its equipment as it shifts ward the use of more synthetic fibers. The cotton spinning mills are now operating me 811,000 spindles. An additional 38,000 spindles being installed will blend yarns meet strong world demand for fabrics of mixed cotton and manmade fibers. Textile ports were valued at $583 million in the first 9 months of 1969, compared with $666 llion in all of 1968. Clothing represents about 78 percent of all textile exports.

Hong Kong's total imports were estimated at $2.4 billion in 1969, up 20 percent. od, beverages, and agricultural raw materials made up about one-fourth of the total. ain imports were estimated at 663,000 tons, slightly less than in 1968. Live ani- ls and meat--major imports--came mostly from mainland China.

Rice imports in 1969 were estimated at 347,000 tons, 10 percent more than 1968. mports from Thailand increased sharply to an estimated 180,000 tons in 1969 or 52 ercent of Hong Kong's rice market. Imports from the United States were less than alf the 40,000-ton level of the 2 preceding years. Takings from mainland China were bout 83,000 tons in 1969, less than in previous years.

Corn imports were estimated at 158,000 tons in 1969, 11 percent above 1968. hailand's market share slipped to three-fourths when Indonesia came in with about 0,000 tons. Wheat imports in 1969 totaled 128,000 tons, nearly 10 percent shy of he record level set the previous year. Australia's share of the Colony's wheat mar- et declined to 48 percent. Canada and the United States each supplied approximately 5,000 tons, about the same as the previous year. Wheat flour imports in 1969 de- lined to an estimated 26,000 tons, compared with 44,000 tons in 1968. Japan, Canada, nd Australia were the major suppliers. Imports of wheat flour declined because local lour mills are cornering larger share of the local market. Imports of fresh oranges n 1969 totaled 66,000 tons compared with 59,000 tons in 1968. The United States upplied 69 percent of this market.

In 1969, Hong Kong's imports of fresh, chilled and frozen poultry, including ffals and liver, totaled 22,000 tons. The United States and mainland China were the ain suppliers. Other sources were Denmark, the Netherlands, and West Germany.

Hong Kong's cotton imports in 1969 were about one-fourth less than the high 196,000-ton level of 1968. Shipments from the United States were off even more sharply. Increasing use of synthetic fibers and competition from foreign growths made their marks in 1969.

Led by reduced shipments of rice and raw cotton, U.S. agricultural exports to Hong Kong declined from a high of $72.4 million in 1968 to $54.6 million in 1969. Exports of raw cotton fell to 116,000 bales from 200,000 bales. Larger shipments of meat, dairy products, and especially fruits and vegetables prevented a steeper cutback in agricultural exports.

Hong Kong's total exports rose to $2.1 billion in 1969 from $1.73 billion in 1968. Its exports are almost entirely industrial products. The Colony exported 25,000 tons of wheat flour in 1969; about half went to Indonesia. The United States remained the major market for Hong Kong's exports, taking $899 million worth in 1969 or 42 percent by value.

Hong Kong's surging economy and free trade policy, combined with recent U.S. promotional efforts, provided a generally favorable climate for expanded sales of American products. Gains in income are providing a steadily growing market for various consumer goods. Several unexpected U.S. rice orders were placed in 1969 because of the Thai's unstable rice prices; but barring special developments, additional rice sales are not foreseen in the near future. On the other hand, dairy products, tobacco, wheat, animal feeds, fruits, vegetables, processed goods, and frozen poultry meat are showing promising growth. (Charles E. Goode)

INDIA

Favorable monsoon rainfall and increased use of improved agricultural inputs in 1969 enabled Indian farmers to harvest record crops of rice, wheat, grain sorghum, vegetables, and fruits. Dry weather from October through mid-January lowered earlier harvest expectations for wheat, barley, and pulses in the spring of 1970.

Still, total foodgrain production in 1969/70 is expected to approach 100 million tons, compared with 94 million tons in 1968/69. Per capita availability of foodgrains in 1970 will be below the levels recorded in 1965 and 1968. Imports of foodgrains declined to 3.9 million tons in 1969, continuing the downtrend evident since the peak in 1966 (table 3). They may be even lower in 1970. More than 3 million tons of wheat may be imported in 1970, mostly in the first half of the year. Shortages of cotton and vegetable oils will cause larger imports of other agricultural commodities in 1970.

Economic activity continued to gain momentum in 1969, despite political uncertainty and shortages of steel, vegetable oils, and certain raw materials. Overall industrial output for India was up 7 percent in 1969. Expansion in the textile industry was hampered by a shortage of certain types of cotton. The output of fertilizer, automobiles, bicycles, tractors and engineering products increased moderately.

GNP for 1969 was about $47 billion, up 6 percent. The money supply increased about 9 percent, and purchases of consumer goods were considerably higher. Foreign exchange reserves increased from $682 million at the end of 1968 to $965 million at the end of November 1969.

Fertilizer consumption rose slightly to 1.8 million nutrient tons in 1968/69. A 10-percent excise tax on fertilizer slowed the increase in fertilizer usage. Fertilizer imports declined, while domestic output increased moderately. Demand for tractors continues strong. Some 18,000 farm tractors will be assembled in 1970,

Table 3.--India: Availability of foodgrains, annual 1964-70

Item	1964	1965	1966	1967	1968	1969	1970
	Million tons						
GROSS AVAILABILITY							
Rice:							
Production	36.9	37.0	30.6	30.4	37.6	39.8	41.0
Net trade	0.6	0.8	0.8	0.5	0.4	0.5	0.5
Supply	37.5	39.8	31.4	30.9	38.0	40.3	41.5
Wheat:							
Production	9.9	12.3	10.4	11.4	16.5	18.7	19.5
Net trade	5.6	6.5	7.8	6.5	4.8	3.1	3.2
Supply	15.5	18.8	18.2	17.9	21.3	21.8	22.7
Other cereals:							
Production	23.7	25.2	21.2	24.1	28.8	25.2	28.5
Net trade	0.1	0.2	1.8	1.9	0.5	0.3	0.1
Supply	23.8	25.4	23.0	26.0	29.3	25.5	28.6
Pulses:							
Production	10.1	12.4	9.8	8.4	12.1	10.4	11.0
Net trade	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Supply	10.1	12.4	9.8	8.4	12.1	10.4	11.0
Total foodgrains:							
Production	80.6	88.9	72.0	74.3	95.0	94.1	100.0
Net trade	6.3	7.5	10.4	8.9	5.7	3.9	3.8
Supply	86.9	94.4	82.4	83.2	100.7	98.0	103.8
PER CAPITA AVAILABILITY	Kilograms						
Rice	78.9	81.9	62.9	60.5	72.5	75.0	75.5
Wheat	32.6	38.7	36.5	35.0	40.6	40.6	41.3
Other cereals	50.1	52.3	46.1	50.9	55.9	47.5	52.2
Pulses	21.3	25.5	19.6	16.4	23.1	19.4	20.0
Total	182.9	198.4	165.1	162.8	192.1	182.5	189.0

mostly 35 horsepower models. Larger imports of tractors are planned in 1970, including 7,000 from Czechoslovakia and 5,000 from the USSR. About 100,000 tractors were in use in early 1970, and a numerical increase of almost 30 percent is expected during 1970. Most of the tractors are located in areas where wheat is grown under irrigation. Less than 5 percent of all cropland in India is cultivated by tractors.

Rice production during 1969/70 is estimated at a record 41 million tons (milled basis). The 3-percent increase in output is attributed to improved yields. Monsoon rainfall was favorable for rice production in most major growing areas in 1969. A marked increase in 1969/70 plantings of high yielding varieties of rice occurred in West Bengal, Uttar Pradesh, Orissa, and Bihar. The total area planted in high yielding varieties in 1969/70 was about three times the 1967/68 level.

The Central Rice Research Institute at Cuttack strives to introduce new varieties which have favorable consumer reception and which carry resistance to certain diseases Padma and Gaya--two new varieties--have done well in northern India. Sales of IR-8 rice were not easy to make in Tamil Nadu in late 1969. Many farmers had to market a large part of their IR-8 rice through procurement centers.

Good rains during the summer were beneficial to grain sorghums and corn. Production of coarse grains is estimated at 28.5 million tons in 1969/70, up 13 percent from the previous year.

Wheat production in 1970 is forecast at 19.5 million tons. This would be a record crop despite dry weather during the first part of the growing season. About 30 percent of the 16-million-hectare wheat area in 1969/70 was planted in high yielding varieties. The fields so planted are all under irrigation, and they will account for over half of the total wheat crop this season.

Gains in the production of foodgrains in 1969 were less striking than those recorded for some other crops. Growing conditions were good for cotton and jute. Cotton production approached 1.2 million tons in 1969. Damage to cotton plants from tirak disease lowered yields in Rajasthan and Punjab. Larger cotton harvests in Maharashtra and Gujarat helped boost India's cotton production by 8 percent in 1969 although the total area planted was about the same. The area planted in long staple varieties has gradually increased. Smaller plantings of medium staple varieties have lowered the proportion of cottonseed to lint.

Mill consumption of cotton increased slightly in 1969 and further gains are expected in 1970. Domestic demand for cotton textiles is increasing faster than supplies of raw cotton. The upswing in textile demand has resulted in the reopening of some mills which were closed in the last 3 years when times were difficult for small operators. Indian cotton mills are expected to use almost 7 million bales (180 kilograms each) during 1970. Manmade fibers currently account for slightly over 10 percent of the textiles sold in India, but over one-fourth of the exports of textiles. Output of manmade fibers is growing more slowly in India than in some other countries in Asia. Many Indians do not like clothes made from manmade fibers, and their cost is still relatively high.

Imports of raw cotton declined sharply during the year ended July 31, 1969. A delay in shipments of cotton from the United States under P.L. 480 contributed to the decline. Use of domestic cotton increased as stocks of imported cotton declined in 1969. With much larger shipments expected under P.L. 480, India's total imports of cotton in 1969/70 may approach the 142,000-ton level of 1967/68.

Exports account for about one-tenth of the sales by India's textile industries. Exports subsidies of the foreign exchange entitlement scheme caused some firms to export textiles for slightly less than the cost of production. By exporting textiles,

ese firms are allowed to retain foreign exchange they can use to import machinery d urgently needed spare parts.

Favorable weather and an expansion in the planted area in 1969 produced a bumper te harvest of about 1.2 million tons, compared with 549,000 tons in 1968. As a sult, mill output of jute products increased markedly in late 1969. Over 95 per- nt of the Indian jute crop is used by domestic mills. When supplies are ample me raw jute is exported to the USSR under trade agreements. About 60 percent of e jute products made in India are exported, and foreign demand remains good. Higher ports of carpet backing and some other jute products in the last 2 years offset aller exports of jute burlap.

The tobacco crop in 1970 is likely to be about 18 percent less than the 347,000 ns harvested in 1969. Floods damaged part of the crop in Guntur district of Andhra adesh. Poor weather lowered the quality of flue-cured tobacco, and export prices y decline.

Production of oilseed crops improved in 1969 but remained below the peak level tained in 1967. The peanut crop increased from 4.5 million tons in 1968 to 5.2 llion tons in 1969. The production of mustard and rapeseed was close to the 1.6- llion-ton level of 1968. In recent years, soybean production has increased in tar Pradesh and Madhya Pradesh. Indian farmers are expected to produce over 100,000 ns of soybeans in 1970. The production of safflower and nigerseed is also increas- g.

Tea production edged upward to 390,000 tons in 1969. Labor problems in West ngal resulted in smaller pickings there. Low prices and ownership transfer of some a plantation also slowed harvesting operations. Coffee production increased to out 73,000 tons. Higher prices and good export sales encouraged coffee growers to e more fertilizer. New plantings of cashew nuts were subsidized by the state vernment in Tamil Nadu. New banana groves planted in Gujarat and Tamil Nadu will ovide fruit for future exports. New mango varieties were planted commercially near me large cities.

In 1969, production of deciduous fruits made a large increase. Farmers in Jammu d Kashmir, Himachal Pradesh, and Uttar Pradesh harvested a record quantity of ap- les. Most of these apples were sold in urban areas throughout India. Production of apes has expanded markedly in the districts of Poona Hyderadbad and Bangalore.

Production of vegetables, including potatoes, is estimated at about 32 million ns in 1969/70. Commercial production of these crops is increasing rapidly near rban centers and in irrigated areas as many farmers find that vegetables double crop ell with wheat and rice. About 100,000 tons of onions were exported in 1969.

India's total exports reached $1.8 billion during the financial year ended arch 31, 1969, up 13 percent over the preceding year. Exports during 1969/70 grew t a slower pace and totaled about $1.9 billion. Exports of jute carpet backing rose harply, and manufactures accounted for most of the export growth.

Agricultural exports in calendar 1969 approximated the $623 million value re- orded in 1968. Low tea prices and lagging production of some oilseed crops limited xport opportunities. Tea exports were down in 1969 because of smaller shipments to he United Kingdom. Competition from Ceylon and East Africa lowered India's prospects or tea sales in London. Exports of tea increased to the USSR and the Middle East. lightly more peanut meal moved to Eastern Europe. Tobacco exports changed little. lightly smaller tobacco shipments to the United Kingdom were offset by larger ex- orts to the USSR. Deliveries of cashew kernels to the USSR increased while those o the United States declined. Overseas sales of cashew kernels totaled 66,250 tons n 1969. Exports of spices increased in value because of higher prices.

The ban on exports of foodgrains continues except for shipments to Indians living abroad, the border trade with Nepal, and special barter arrangements.

Total imports by India declined in 1969 to about $2.3 billion. Agricultural imports in 1969 were only about half the $1 billion recorded in 1967. Imports of foodgrains and fertilizer were down.

Wheat imports declined from 4.8 million tons in 1968 to 3.1 million tons in 1969. Arrivals from the United States fell from 3.8 million tons to 2.2 million tons. Imports of U.S. wheat purchased outside P.L. 480 declined from 437,000 tons in 1967 to 34,000 tons in 1969. Arrivals of wheat donated by Canada declined slightly in 1969 to 586,000 tons. Imports of Australian wheat fell from 234,000 tons in 1968 to 69,000 tons in 1969, while European wheat jumped from 41,000 tons to 236,000 tons.

Imports of soybean oil increased in 1969. Larger imports of vegetable oils are anticipated in 1970 to cope with the growing shortage. Tallow imports are also expected to rise this year.

Cotton imports declined from 145,000 tons in 1968 to about 117,000 tons in 1969. Larger imports of cotton are likely in 1970, with about one-third of the supply coming from the United States. The United States, UAR, Sudan, and East Africa usually supply most of India's cotton imports.

U.S. agricultural exports to India declined from $363.5 million in 1968 to $261.7 million in 1969. Another decline is likely in 1970 unless U.S. vegetable oil and cotton shipments to India are favorably financed. About 1.7 million tons of wheat valued at about $100 million are scheduled for shipment under P.L. 480 to India before June 30, 1970. Our total wheat exports to India during 1970 are likely to approximate 2 million tons. Exports of wheat from the United States to India declined from 4.1 million tons in 1968 to 2.1 million tons in 1969. Exports of grain sorghums to India declined from 1.7 million tons in 1967 to 294,000 tons in 1969.

American imports of all items from India in 1969 were slightly higher than the $312 million recorded in 1968. Jute products, particularly carpet backing, accounted for about half of the American imports from India in 1969. U.S. imports of agricultural commodities from India were down because of smaller arrivals of cashew kernels and tea. Larger purchases of Indian cashew kernels by the USSR lowered supplies available for export to American customers.

Marked changes are occurring in the diet of the people in the topmost income levels. Many urban Indians are adding new items to their diet. Sales of biscuits, ice cream, carbonated soft drinks, loaf bread, and chicken meat are increasing rapidly In 1969, foodgrains accounted for over two-thirds of the approximately 2,100 calories obtained daily by the average Indian from all foods. (John B. Parker, Jr.)

INDONESIA

Although the output of Indonesia's all-important rice crop was considerably lower than early estimates, the 1969 rice harvest did surpass by a narrow margin the record crop of 1968. Corn, second only to rice as an Indonesian food staple, bettered the small 1968 production by more than 10 percent. Substantial increases in output also were registered by soybeans, peanuts, sweetpotatoes, and sugar. Production of rubber, the top moneymaking agricultural export, stagnated. Palm oil production was down 8 percent. Coffee's gains were a scant 2.5 percent. The tobacco crop stood almost alone among export crops with a strong 18-percent advance.

Indonesia seems to have won its long struggle against inflation. The dizzy rice advance of 650 percent in 1966 was cut to less than 10 percent in 1969. Although a severly trimmed budget and painfully tight credit broke the inflationary spiral, these controls resulted in near stagnation of economic activity. The government is now concentrating on an expansionary fiscal and monetary program to get the economy moving again. Sharply increased credit is being made available for the export trade and for agriculture, which is Indonesia's major source of export goods.

Indonesia's balance of payments improved in 1969, moving up to a surplus of $23 million from a deficit of $12 million in 1968. Imports were higher than expected, but the import value of consumer goods was down. Imports of machinery, transportation equipment, and raw materials--items needed to support domestic production--were up.

Ideal weather together with expanded use of seeds and improved cultural practices favored a record rice harvest of 16.0 million tons of paddy in 1968, up 12 percent. The 1969 crop is estimated at 16.2 million tons, down 2 million tons from earlier expectations and only 1 percent above the 1968 level. To avoid a food shortage government planners moved fast in late 1969 to contract for overseas purchases of 80,000 tons of rice for immediate delivery. Enough foreign rice arrived in time to satisfy increased consumption demands during the yearend holiday season. Prices leveled off as additional supplies arrived. Imports for the entire year reached 06,000 tons. Over half came from the United States under P.L. 480. The remainder, in order of volume, arrived from Burma, Thailand, Egypt, Australia, Japan, Cambodia, and Singapore.

More serious a problem than the weather-damaged autumn crop was the late arrival of the wet monsoon. Its tardiness set back rice planting for the next main wet crop by 4 to 6 weeks and delayed the coming harvest accordingly. Officials were extremely reluctant to publicize the country's rice import needs in 1970. However, most believed requirements would be higher than last year's 600,000 tons.

To ease the pressure on tight rice supplies, Indonesia imported more than 300,000 tons of wheat flour in 1969. Most of this flour went to big cities where the demand was strongest. The United States, with shipments of 163,000 tons, was the largest supplier. Australia shipped about 43,000 tons. Other exporters included Japan, Hong Kong, and Singapore. Last November the United States agreed to supply Indonesia with 150,000 tons of flour under P.L. 480. Most of the deliveries should be made in the first 6 months of 1970. Indonesian food planners have projected total flour imports of 500,000 tons in 1970, but actual receipts may well be lower.

Early estimates place Indonesia's important 1969 corn crop at about 3 million tons, up 10 percent from the lean harvest of 1968. This volume was generally considered adequate to meet the 1969 export goal of 180,000 tons, almost three times the 1968 level of 65,000 tons. With favorable growing weather and a larger share of available fertilizer, corn exports may rise to 250,000 tons in 1970. Japanese activity continues in promoting production of varieties suitable for their growing livestock industry. A large U.S. firm recently showed interest in establishing a mixed feed industry in Indonesia.

Indonesia is now unable to supply its own sugar needs. Exports were abandoned in 1966, and since then imports have ranged from 30,000 to 50,000 tons a year. With a gain in production of refined sugar from 625,000 tons in 1968 to 677,000 tons in 1969, the government plans to end sugar imports and resume exports before the new development plan ends.

Production of yarn and cotton cloth began to climb in 1969. This followed a long wait for spare parts needed to repair idle equipment in Indonesia's textile mills. Output of cotton cloth rose 40 percent to 450 million meters. Imports of cloth dropped more than 15 percent to 447 million meters. If the recently launched development plan is successful, domestic output of cloth will double by 1973 and imports level off. Yarn production in 1969 reached about 190,000 bales (400 pounds each) a gain of 60,000 from 1968. Imports of yarn totaled 184,000 bales. The target for 1973 is 375,000 bales produced and 260,000 bales imported. Imports of raw cotton increased dramatically during the last decade and reached an estimated 190,000 bales in 1969, of which 123,000 bales were from the U.S. Raw cotton imports in 1970 should run 30,000 to 50,000 bales higher than last year.

Production of rubber, a major foreign exchange earner, was 762,000 tons in 1969, scarcely changed from the previous year. However, 1969 prices--and therefore earnings--were substantially higher. For more than a decade output gained by less than 1 percent a year as plantations were neglected. Furthermore, replanting schedules were ignored, and recent surveys indicate that 60 percent of the plantings are too old to yield optimum returns or to respond much to larger applications of fertilizer now possible.

The output of palm oil, over the years a steady earner of foreign exchange, slipped off 8 percent in 1969 to 172,000 tons. The disappointing performance of palm oil--like rubber--was attributed to failure to replace old trees which had passed their production peak, and to past shortages of fertilizer. The Asian Development Bank's first loan to Indonesia was for $3.5 million to rehabilitate one of the nation's largest oil palm estates.

Two of Indonesia's leading sources of proteins, soybeans and peanuts, made the best gains among all crops. Peanuts soared 29 percent to 492,000 tons, and soybeans went up 33 percent to 442,000 tons. Indonesians are becoming more nutrition conscious, and steadily increasing production gains probably will be encouraged.

Sweetpotato production went up 589,000 tons to 2.7 million tons in 1969 while the output of cassava declined 527,000 tons to 11.8 million tons. Although sweetpotatoes have a slight edge over cassava in nutrient value, the net gain for Indonesia's food supply was negligible. Production of both cassava and sweetpotatoes has been relatively low over the last decade as many farmers moved their plantings to less fertile areas to make way for rice or other more profitable crops on the better lands.

Coffee production, at 167,000 tons in 1969, was unchanged. However, both estate and smallholder crops have made a very substantial gain from the 89,000-ton level 10 years ago. The International Coffee Agreement tends to stablize prices but limits shipments. Hence, much of increased volume must find markets in nonmember countries.

Indonesia's output of tobacco made a good 18-percent gain to 130,000 ton in 1969. In recent years, however, quality--and export prices--have declined. The government plans to help smallholders and estates to grow and market a better product. (Goodloe Barry)

JAPAN

Production of major crops in 1970 is expected to continue the downward trend of the past 2 years. Rice output likely will drop. Wheat production is forecast at 650,000 tons or 15 percent below last year. Barley is expected to yield a 750,000-ton harvest, the smallest since 1963. Production gains in 1969 for livestock products, particularly pork, milk, and eggs, should continue in 1970.

Imports of agricultural commodities during 1969 totaled $3.7 billion or 8 per-
it above 1968. More than 50 percent of Japan's imports of farm products last year
sisted of wheat, corn, grain sorghum, barley, soybeans, cotton, tallow, and tobacco
if. Of this trade totaling $1.7 billion, the United States supplied one-half.

GNP for 1969 (current price basis) is estimated at $167 billion or 17 percent
ove 1968. At constant prices GNP was up 13 percent. Per capita GNP approached
,400. Forecasts indicate an equal gain in 1970. Agriculture's contribution to the
declined slightly in 1969; it is estimated at $15 billion or 9 percent of the
tal. Most of this decline reflected efforts to stabilize rice prices and trim out-
t. Foreign exchange reserves at the end of 1969 were estimated at $3.7 billion, up
percent.

Consumer prices continued their uptrend, rising about 5 percent during the year.
st of this increase was in the foodstuffs sector, chiefly fish, processed foods,
getables, and fruits. Prices for rice remained unchanged. Prices for livestock
oducts, particularly milk and meats, were well above those in most countries of the
rld. Japan's high food prices stem from policies restricting agricultural imports
d from production declines in most food crops.

The 1969 rice crop--17.5 million tons of paddy--was down 3 percent from the rec-
d harvest of 1967. The 1970 crop may be down another 10 percent, depending on the
ount of rice area diverted to other crops. Nevertheless, carryover stocks on
vember 1, 1970, are expected to total 5.7 million tons, the highest of record (table
.

Table 4.--Japan: Supply and Distribution of milled rice; 1960-64 average and annual 1968 through 1970 1/

Item	Average 1960-64	1968	1969	1970 2/
	1,000 tons			
eginning stocks	3,351	3,617	4,938	5,752
roduction:	15,920	18,061	17,504	16,986
Paddy	11,590	13,149	12,743	11,500
Milled	368	283	54	15
mports	0	300	364	500
xports	11,765	11,811	11,619	11,580
omestic consumption	3,543	4,938	5,752	5,187
losing stocks				

1/ Years beginning November 1.
2/ Estimated.

Other grain crops and pulses continued a downward trend in 1969. Wheat produc-
tion fell to 758,000 tons or 25 percent below 1968, reflecting reduced plantings
and unfavorable weather. A smaller wheat crop of about 650,000 tons is expected in
1970 because of a 15-percent cutback in plantings. Other reductions in 1970 crops are
likely for pulses and feedgrains.

The main emphasis in fruit crops in recent years has been on the production of
satsuma (mandarin) oranges. Production of 2.3 million tons in 1969 was just slightly
below the record harvest in 1968. Area in oranges has expanded rapidly in recent
years because of a strong demand and favorable returns to growers compared with some
other crops. Citrus trees can also be grown on rough terrain, and in some areas they

are combined with tea plantings. About 80 percent of the crop is utilized in domesti consumption. Canned satsuma orange production is by far the largest fruit item processed in Japan. The 1969/70 pack of canned oranges will total around 12.5 million cases--a record.

Overproduction of rice poses a major agricultural problem. Large surplus rice stocks have brought into focus the need for revision of the country's agricultural policy from both a production and trade standpoint. The traditional policy of increasing rice prices paid to farmers was terminated in 1969, but more definitive measures must be taken to interest farmers in other crops and livestock production.

Late in 1969 the Ministry of Agriculture announced a 3-year plan to reduce the rice area by 350,000 hectares per year beginning with the 1970 crop. Land diverted in the 1970 season may not exceed 30,000 hectares. Most of this area is expected to be sown to forage crops in an effort to establish pastures for increased livestock production. Beginning with 1970, the government's purchase price for rice may be pegged at the 1969 level but set on a quality sliding-scale basis to encourage production of high quality rice.

Legislation calling for major changes in the land tenure act is expected to be presented to the Diet for approval sometime in 1970. Problems arise from inefficient use of machinery, shortages of labor, and the small size of most farms. Until legislation is enacted to permit fundamental changes in agricultural policy, significant changes in overall farming are unlikely.

About $2.2 million has been budgeted by the government to improve citrus fruit production. Approximate allocations are $900,000 to assist tangerine producers, $600,000 to build fruit juice processing plants, and the remainder to construct storehouses for tangerines.

Japan's cotton imports in 1969 totaled 677,000 tons, compared with 808,000 tons in 1968. This trade was valued at $414 million--down 18 percent. The United States supplied 109,000 tons, less than half the level of 1968. Imports of U.S. cotton were partially offset by increased imports from Mexico and Brazil. The U.S. shipping strike in early 1969 and shortages of certain lengths of U.S. cotton were behind the reduced shipments of U.S. cotton to Japan. Japan should import 680,000 tons of cotton in 1969/70 with the U.S. share at about one-fifth.

Consumption of raw cotton in 1969/70 is expected to decline from the 754,000 tons a year earlier. In recent years, cotton spinners have been decreasing their production of cotton yarns and cotton fabrics while emphasizing production of woolen textiles, manmade fibers, and synthetic materials. Cotton yarns and cotton mixtures still accounted for about 60 percent of total yarn turnout in 1969 but less than 50 percent of all fabric production.

Wheat consumption for food use has begun to level off, and increased consumption is now related to the 1-percent annual growth in population. Further gains in Japanese wheat consumption depend largely on the growth of large-scale bakeries and the promotion of biscuits and speciality wheat flour products. To date the progress in the baking industry has been slow, and foreign investments in this field are still restricted.

Total imports of wheat in 1969 reached a record 4.3 million tons or 6 percent above 1968. Of this trade, the United States supplied 2 million, little change from a year earlier. Total imports in 1970 are forecast at 4.5 million tons. Imports of U.S. wheat in 1970 will probably increase to 2.1 million tons. Japan is expected to increase its imports of U.S. hard wheats to supplement smaller imports of Canadian Manitoba No. 4 and Australian Queensland Prime Hard.

Feedgrain imports in 1969 totaled 9.1 million tons. The bulk consisted of 5.5 llion tons of corn and 2.9 million tons of grain sorghum, largely supplied by the ited States. The U.S. share of the corn market in Japan increased from about 50 rcent in 1968 to 60 percent in 1969, reflecting reduced takings from South Africa ich had a poor crop. Imports of feedgrains in 1970 are forecast at 10 percent above st year. Most of this increase will be in corn, imports which are currently esti- ted at 6 million tons. The United States will retain its large share of the corn rket. Argentina, South Africa and Thailand will supply most of the remainder. rghum imports for 1970 will be about 3 million tons. The level will depend upon e relationship of sorghum prices to corn. In the past 3 years, import prices for rn have been less than sorghum while volume imports of sorghum have averaged about lf as much as corn.

Imports of tobacco leaf in 1970 are forecast at the 35,000-ton level, up 6 per- nt. Large carryover stocks of all types of tobacco are expected to meet processor eds for many months. A program introduced by Japan's tobacco industry to improve e domestic leaf may result in reduced tobacco imports--particularly of flue-cured pes--within a few years.

Imports of soybeans in 1969 amounted to 2.6 million tons or 6 percent above 1968. nsumption of soybeans for all purposes is expected to increase by 10 percent in 1970, nd imports are expected to rise by about the same percentage. The planned increase n soybean imports should offset discontinued deliveries of Russian sunflower seeds. he United States supplied 85 percent of Japan's total imports of soybeans in 1969.

The Japanese government further reduced the import tariff on soybeans effective arly 1970. This reduction is in keeping with scheduled GATT concessions negotiated nder the Kennedy Round. The new rate will be $6.66 per ton, compared with the cur- ent rate of $9.33 per ton. Sorghum and dried dates were placed on the Automatic pproval list effective April 1, 1970. The duty on raisins, in containers over 10 ilograms, is to be reduced from 20 percent to 10 percent in three stages from pril, 1970 through January 1, 1972.

Japan continues to extend aid to less developed countries in the hopes of build- ng up markets for its manufactures. A new food act is under consideration by the resent Diet to provide legal justification for long-term aid sales of rice to Paki- stan, Indonesia, and other countries.

The negotiation of the final year of operation of the Japan-USSR trade arrange- ment has eliminated USSR exports of sunflower seeds and certain animal feeds in 1970. This action might provide a favorable climate for increased U.S. exports of safflower seed to Japan during 1970. (Mary E. Long)

REPUBLIC OF KOREA

Plentiful and well distributed rainfall in 1969 boosted Korea's total agricul- tural output by 15 percent after serious setbacks from droughts in 1967 and 1968. Production of paddy rice climbed to 5.6 million tons, a 28-percent increase. Harvests of other grains changed little from 1968. Production of vegetables increased sharply to 2.5 million tons.

Total foodgrain imports are estimated at 2.1 million tons in 1969, up two-thirds from a year earlier. The 1970 outlook is for the same volume, which includes 500,000 tons of rice, 1.2 million tons of wheat, and 210,000 tons of corn for stockfeed. Im- ports of raw cotton, nearly all from the United States, increased to an estimated 95,000 tons in 1969 from 86,000 tons in 1968.

GNP in 1969 is estimated at $6.6 billion, at current market prices, up 16 percent from 1968. Per capita GNP rose to $209. Gold and foreign exchange reserves totaled $552 million at the end of 1969, more than one-third above the previous year. Strengthening of Korea's foreign exchange position in 1969 was due to larger inflows of foreign capital investments, higher exports, and increased expenditures by Americans stationed in Korea.

Seoul consumer prices have risen by 51 percent since the end of 1965. They increased 10 percent in 1969. To help curb inflation, the government devalued its currency by 4.5 percent on November 4, 1969. The official rate of exchange is 304 won for one U.S. dollar. In the long run, the devaluation should help limit imports and serve to stimulate exports and check domestic prices.

Industry continued to make steady gains in 1969, with work moving ahead for new plants to produce steel, fertilizer, machinery, coal, cement, hydroelectric power, clothing, and other textile products. The cotton textile sector is the keystone of Korea's textile industry. There are now some 25 cotton spinning mills operating about 940,000 spindles. The goal in 1972 is 1.4 million spindles. Clothing exports, representing 26 percent of all textile exports, are estimated at $153 million in 1969. The Republic imported $8.1 million worth of greasy wool in the first 10 months in 1969, compared with $7.2 million in all of 1968. Australia was the largest supplier.

Fertilizer consumption in 1969 approximated 740,000 tons. This contrasts with 640,000 tons in 1968 and 486,000 tons in 1967. Chemical fertilizer production increased moderately to 407,000 tons. Imports of manufactured fertilizer declined from 919,000 tons in 1966 to 638,000 tons in 1968. Imports in the first 10 months of 1969 totaled only 278,000 tons. Fertilizer exports are estimated at 140,000 tons in 1969. The Republic imported 500,000 tons of lime from the United States in 1969.

Agricultural production--especially of rice--was favored by good summer rains in 1969 and total output surpassed the previous drought years by 15 percent. Production of vegetables continued the strong uptrend of the 1960's and this contributed to the overall increase in agricultural output. Despite late floods, rice blast, and cold weather, the 1969 paddy rice crop totaled 5.6 million tons--28 percent above the 1968 crop and well above the record crops in 1964 and 1966. Both planted area and yields were at high levels.

High price supports before the planting season spurred farmers to plant more rice. But the market price went even higher and the government was able to purchase only 210,000 tons, or less than 40 percent of the target. The government is planning to increase military, government, and price stabilization stocks by importing an estimated 500,000 tons of rice in 1970. After rice, barley is the most important food crop. As incomes increase, there is a tendency for barley consumption to decline as consumers switch to rice. The 1969 barley harvest was nearly 2.1 million tons, about the average level of the last 5 years. In 1970 some barley land likely will be switched to vegetables and other crops in greater demand. The wheat crop was up 6 percent in 1969. Combined production of corn, millets, and grain sorghum crops declined by 15 percent. Production of fruits, tobacco, and sweetpotatoes increased moderately, but output of soybeans, potatoes, and pulses declined or showed no increase in 1969. The harvest of vegetables increased sharply in 1969 to 2.5 million tons.

Although meat production has been expanding rapidly in recent years, the level of output is relatively very low. Consisting mainly of pork, beef, and poultry, total production is estimated at no more than 165,000 tons. Per capita production at no more than 5.3 kilograms per year contrasts with 11 kilograms in Japan and 28 in Taiwan.

e government is promoting livestock and poultry development. A Cooley loan of 00,000 in January 1969 will help finance a modern mill with a feed processing pacity of 40,000 tons per year, a processing plant capable of handling 600 broilers r hour, a hatchery with a capacity of 200,000 eggs per cycle, and poultry rearing rms.

Korea's imports, estimated at $1.8 billion in 1969, exceeded exports by $1.2 llion. The trade deficit was covered partly by U.S. aid, Japanese reparations, in- stments, and other foreign aid. Total foodgrain imports in 1969 are estimated at 00 million or 11 percent of total imports. Rice imports by value accounted for percent of all foodgrain imports in 1969.

Foodgrain imports rose sharply in 1969 to an estimated 2.1 million tons, re- ecting the shortfall in rice production in recent earlier years. Total rice im- rts increased from 247,000 tons in 1968 to about 724,000 tons in 1969. The United tates supplied 445,000 tons, and the remainder was purchased from Japan. Rice im- rts of 500,000 tons are anticipated in 1970. Wheat imports increased from 813,000 ns in 1968 to 1.2 million tons in 1969 and will likely match this level in 1970. he United States supplied nearly all of Korea's wheat requirements in 1969, much nder P.L. 480. Imports of corn for animal and poultry feed probably totaled 130,000 ns in 1969 and may exceed 200,000 tons in 1970.

Imports of raw cotton in 1969 increased sharply to an estimated 95,000 tons. early all come from the United States. Raw sugar imports during the first 10 months 1 1969 totaled 157,000 tons--the same amount as in all of 1968. Taiwan is the largest upplier. The United States and Japan are the major suppliers of agricultural com- odities to Korea.

U.S. agricultural exports to Korea increased from a record value of $190 million n 1968 to $235 million in 1969, due mainly to larger shipments of rice. Cotton, heat, corn, and wheat flour also made gains, but soybeans declined. Korea ranked hird (after Japan and India) among Asian markets for U.S. agricultural products in 969. Exports of U.S. raw cotton to Korea increased to 425,000 bales in 1969. A reater demand for man-made fibers and further shifts by cotton millers to short- taple cotton may tend to limit U.S. exports of raw cotton in 1970.

Korea's total exports in 1969 are estimated at $600 million or 32 percent above he record $455-million level of 1968. Agricultural exports account for a small por- ion of total exports. Raw silk, hogs, beans, leaf tobacco, canned vegetables, and ruits are the principal products. Other major exports include clothing, plywood, igs, marine products, electronic manufactures, and textiles. The United States, apan, and Hong Kong are the major buyers of all Korea's exports. (Charles E. Goode)

MALAYSIA

In its determined drive to reduce imports and become self-sufficient in rice production, Malaysia is expanding the areas double cropped to rice. Output of paddy climbed 15 percent in 1968 to hit a record 1.1 million tons, then soared 26 percent in 1969 to reach a new peak of 1.3 million tons. Much of the output gain was helped along by a 75,000-acre expansion boosting the entire 2-crop area to 225,000 acres, which produced 260,000 tons of paddy in 1969. The double cropping area is either land reclaimed from the jungle or--more often--existing one-crop fields converted to two by providing an ample supply of water for all seasons.

A huge project is nearing its operational start-up. The first water impounded in the new $75-million Muda River dam was ready for release in late January, but the fields were not prepared because of late rains. When the entire complex is functioning

in 1971, there will likely be a net increase of 415,000 tons of paddy rice. This is 270,000 tons milled basis or about equal to average annual imports in 1967 and 1968.

The nation's economic output continues strong stimulated by good demand for Malaysia's predominantly agricultural exports even though the rate of new capital investment has slowed. Production of rubber, which occupies 60 percent of the cultivated area and earns the major share of the country's foreign exchange, continued its steady gains, moving up from 1,061,000 tons in 1968 to 1,118,000 in 1969.

To escape the perils of dependence on a single export crop, government planners have developed an oil palm industry. Production of the oil soared from 92,000 tons in 1960 to 313,000 tons in 1969. Malaysia is now the world's largest exporter of both rubber and palm oil, and second only to Hawaii in shipment of canned pineapple. Its palm oil industry is now considering the possible expansion of production to as much as 2 million tons of oil per year by 1980.

A pilot project to rehabilitate about 11 percent of the total area in coconuts is on target, but no overall improvement in production can be expected without a massive program to replace many thousand overage and low-producing trees. The production of copra in Malaysia was 154,000 tons in 1968 and 137,000 tons in 1969. The per acre output of copra from revitalized smallholdings was estimated at 1,000 pounds a year while holdings not included in the pilot project were estimated to yield 600 pounds.

To expand crop diversification the government recently formed a central agency to coordinate the tasks of scattered research facilities and tackled some of the problems on which little progress has yet been made. Corn and sorghum, sugar and bananas are believed to hold the most promise.

Research on selection of high yielding varieties adapted to local conditions is being accelerated. Under experimental planting conditions, output per hectare has ranged from 2,580 to 3,480 kilograms. Farm production of corn in 1969 was 14,000 tons, up 2,000 tons from 1968. Imports of corn, largely from Thailand, were 186,000 tons in 1968 and 174,000 in 1969.

Bakery products made from wheat flour processed in domestic mills are fast becoming established as a major food staple in urban areas. Severe customs restrictions have been applied to imports of flour to assure that the three local mills with local employees are kept busy and not subjected to intense competition. No wheat is grown in Malaysia. Wheat imports for the mills were 360,000 tons in 1968 and 325,000 in 1969. These mills can easily satisfy domestic demand for slightly over 260,000 tons of flour. All but 10 percent of the imported wheat in 1968 came from Australia while the United States supplied a scant 3 percent. Proximity to the Malaysian market is Australia's principal advantage. (Goodloe Barry)

NEW ZEALAND

New Zealand's agriculture in 1969/70 may show no increase in volume output over 1968/69. Except for fruits and tobacco, crop yields are down sharply in 1970 because of low rainfall and drought conditions in major farm areas. Meat production may increase; the actual level of slaughterings will depend on government efforts to secure imported feedgrains to maintain the livestock through the winter months and until the drought subsides. Payments will be made to farmers to defray freight costs of moving grain and hay to farms as well as moving cattle from drought to feed areas. Special import licenses will be granted to facilitate imports of over 300,000 tons of feed grains for livestock during the 1970 winter. The United States continues as New Zealand's largest market for beef and our takings of its lamb have increased.

Net farm income, estimated at $386 million in 1969/70, was about 6 percent above 68/69. This increase was supported by the steady growth in foreign demand the past years for New Zealand's farm products, especially meat, wool, and horticultural crops. lume shipments of butter have also been maintained, even though export prices for iry products have been depressed. GNP increased by 8 percent in 1969/70 to $5.5 llion, of which agriculture accounted for 7 percent.

The government continues to stimulate expansion of meat animals and horticultural ops through tax incentives and subsidies to farmers for pesticide and fertilizer penditures. More liberal credit and loan policies have been adopted to encourage nd development and farm diversification in both crops and livestock.

The 1969/70 crop harvests in the process of completion are smaller than last ear. The growing season was one of the driest on record. Shortages of rainfall af- ected all major production areas except the southern parts of South Island. Greatest ecreases in crop production are expected in wheat, barley, potatoes, pulses, onions, nd grass seeds. The supply of rye grass seed is so short that exports in 1969/70 nd 1970/71 will drop sharply, particularly as domestic demand for grass seeds has ncreased. Apple and pear harvests are expected to be the highest in years. The to- acco harvest is expected to benefit from the dry weather conditions.

Drought conditions reduced the area planted to wheat by 12 percent to 274,000 cres. Production is now estimated at 327,000 tons, down from an early estimate of 46,000 tons. The current production is not adequate to meet domestic food and feed equirements.

Livestock numbers in 1970 reflect small increases over 1969 levels, but the full ffects of the current drought are not known. Cattle numbers are only slightly above he 8.6 million of last year. Lambing conditions were good in 1969, but sheep num- ers declined by 1 percent to 60 million head. The drop was due mainly to a 1968 ecline in breeding ewes.

Beef and veal production in 1969 increased 6 percent to the level of 406,000 ons chiefly because of good market potential and high export prices. Weights of cat- le were generally maintained despite the drought. Wool production in 1969/70 will ncrease only slightly to about 336,000 tons. Mutton production might advance 3 per- ent to 203,000 tons. Lighter carcass weights of sheep are reported for 1969/70, ompared with last year.

Production of butter fat in 1969/70 is estimated at 283,000 tons or about 6 per- ent above 1968/69. Production continues at record levels despite a large buildup of utter stocks the past 2 years. Cheese production declined in 1968/69 as some of the ilk usually processed into cheese was diverted to casein. Casein production in- creased from 47,000 to 69,000 tons. Cheese production in 1969/70 will be up to 102,000 tons, but still below the 106,000-ton average for the mid-1960's. Fluid milk roduction in 1970 is expected to decline.

New Zealand's agricultural policy continues to be governed by long-term targets for increased production. It emphasizes promotion of pastures for livestock and de- rived products such as meat, milk and wool. Farm output is expected to grow at about 3 percent annually through 1972/73.

The government is encouraging farmers to diversify production--from dairying-- with emphasis on meat and crop production. It does this by extending special tax concessions on land purchases and development expenditures and by making liberal loan arrangements to finance mixed livestock farm units.

New grass varieties are being developed and new breeds of livestock introduced to promote more efficient beef production. Some of the new grasses are highly nutritious and they provide good feed over a prolonged grazing season.

From the 1969/70 budget the government subsidized the cost of pesticides. The subsidy amounts to 50 percent of the factory price, with controlled prices to farmers. This action was taken to compensate for the cost of pesticides to replace DDT. The fertilizer transport subsidy was revised to a flat rate of 6 cents per ton-mile, but not to exceed a maximum of $3.36 per ton.

Export earnings for 1968/69 totaled $1.1 billion--the first year to exceed a billion dollars. For 1969/70 the total value of all exports is estimated at $1.2 billion, or 9 percent above last year. Agricultural commodities now comprise about 82 percent of the total value of all exports against 94 percent 10 years ago.

In 1969/70, meat exports--New Zealand's largest foreign exchange earner--will probably strain the country's production capability. Increases in exports are forecast to the United States, Japan, and Canada. Beef supplies will probably be adequate to the demand, but mutton availabilities for export may be down in 1969/70. In the first 10 months of calendar 1969 New Zealand's exports of beef to Canada increased twelvefold over the same period of 1968. Canada is now New Zealand's second market for beef.

Total meat exports to the United States in 1969 were estimated at about the same level as 1968. Marketing prospects in the United States for beef and lamb continue good during 1970 with both prices and demand at high levels.

New Zealand's exports of butter to the United Kingdom have been limited to a base quota of 179,000 tons. Prices of New Zealand butter have remained steady since 1967 at about 32 cents per pound on the London market. New Zealand hopes to hold its U.K. cheese allocation of 76,000 tons. It will have an increased market for cheese in the U.S. market by about 3,400 tons.

Efforts to diversify markets for dairy and meat products in 1969 revealed some new credit sales by the New Zealand Dairy Board. Chief among these was a credit issued to Peru for the purchase of nonfat dry milk and anhydrous fat. Another was a 3-year arrangement with India for sales of nonfat dry milk on 50 percent commercial and 50 percent aid terms. In addition, New Zealand hopes to increase sales of cheese to Japan, Taiwan, Korea, and possibly Indonesia in 1970. Sale of 7,000 tons of meat was made to the USSR.

Export receipts for wool in 1969/70 were $246 million or 3 percent below last year. This is due mainly to the general decline in wool prices during recent months.

Fruit exports to the United States in 1968/69 were valued at about $300,000. This consisted mainly of fresh apples and pears which arrived on the U.S. market in the winter months. There is a growing U.S. market for raspberries and strawberries air shipped from New Zealand.

On the New Zealand import side prospects for U.S. exporters are not too good. Tobacco is the principal import from the United States, and pressure is mounting for greater use of New Zealand's own leaf, which is in fairly large supply. Consumption of tobacco products declined in the past year, but it is not clear whether this a general pattern or related to high prices. Of the 3,400 tons of tobacco leaf imported in 1968/69, the United States supplied 52 percent while South Africa and South Korea supplied 29 and 16 percent respectively. This is in contrast to the late 1950's when

e United States supplied 90 percent of the market. Rice, dried fruits, and small eds will be in good demand in 1970 and a relaxation of import restrictions on vegeble seeds may stimulate some imports. (Mary E. Long)

PAKISTAN

Adverse weather slowed the momentum of the Green Revolution in 1969. The wheat rvest in the spring of 1969 rose 3.6 percent to about 6.7 million tons--but this s 1 million tons less than expected. Rice production increased about 2.5 percent 1969 because of an increase in the area planted. Large crops of cotton and jute 11 benefit Pakistan's exports in 1970. Exports of raw cotton in 1969 were only ,000 tons, or half the level recorded in 1968. Pakistan's imports of agricultural mmodities from the United States are expected to exceed $100 million in 1970 beuse of larger arrivals of wheat and soybean oil under P.L. 480. Imports of food tems from Europe and Oceania will also rise. Wheat imports dropped from 1.5 million ns in 1968 to 326,000 tons in 1969, but a revival of wheat imports near the 1968 evel is scheduled this year.

Pakistan's military government calmed the political crisis that developed in arch 1969. Democratic elections are planned. Fulfillment of promised deliveries of oodgrains, vegetable oils, and manufactured products to East Pakistan helped to imrove conditions there. During 1969/70 the United States is scheduled to send about million tons of wheat and over 50,000 tons of vegetable oils to East Pakistan. otal deliveries of food grains to East Pakistan during 1969/70 are now scheduled at .7 million tons. Prospective shipments of grain from West Pakistan include 400,000 ons of milled rice and 100,000 tons of wheat. Deliveries of 100,000 tons of Japanese ice to East Pakistan in early 1970 may be followed by larger supplies. In recent ears the food situation has improved in West Pakistan but remained deficient in East akistan. The per capita use of rice and wheat combined in East Pakistan was about wo-thirds more than in West Pakistan, during the early 1960's, and it is currently bout one-fifth higher (table 5). West Pakistan's calorie intake continues to exceed ast Pakistan's because of greater use of foods other than rice and wheat.

able 5.--Pakistan: Production, net trade, and availability of wheat and rice combined, July-June 1960/61 through 1969/70

Year beginning July	East Pakistan				West Pakistan			
	Production	Net trade	Availability	Available per capita	Production	Net trade	Availability	Available per capita
	Million tons			Kilos	Million tons			Kilos
960/61	9.70	.69	10.39	199	4.83	.66	5.49	115
961/62	9.66	.39	10.05	186	5.21	.46	5.67	117
962/63	9.92	1.45	11.37	203	5.27	.30	5.57	112
963/64	10.65	1.07	11.72	202	5.45	.57	6.02	119
964/65	10.53	.34	10.87	181	5.60	1.38	6.98	136
965/66	10.59	.88	11.47	185	5.25	.27	5.52	105
966/67	9.64	.98	10.62	165	5.69	.66	6.35	119
967/68	11.23	.91	12.14	183	7.92	1.17	9.09	167
968/69	11.30	1.12	12.42	183	8.62	-.48	8.14	146
969/70	11.60	1.70	13.30	190	9.40	-.50	8.90	156

Note: Net trade for East and West Pakistan reflects shipments between the two areas, ostly shipments of rice from West Pakistan to East Pakistan. Minus sign indicates net xports by West Pakistan.

Rice and wheat combined account for about 90 percent of the calories received in East Pakistan, compared with 60 percent of the total in West Pakistan. Wheat has become important in the diet of urban areas of East Pakistan in the last decade, and it now accounts for almost 10 percent of the caloric intake there. The diet in West Pakistan is more diversified, with wheat accounting for about half of the calories received. Per capita use of coarse grains, milk, vegetable oils and sugar is considerably higher in West Pakistan. Grains from foreign sources and West Pakistan are needed in East Pakistan because production is growing so slowly.

Pakistan's GNP increased by about 6 percent in calendar 1969, reaching $14 billion. Industrial output increased about 7.5 percent, although strikes in Lahore caused a slight dip in the output of textiles during November. The output of jute products in 1969 remained about the same, although supplies of raw jute used were down from February through April. Sales of manufactured consumer goods were up in cities and prosperous farm areas.

Total production of paddy rice rose from 20.1 million tons in 1968 to about 20.6 million tons in 1969. West Pakistan harvested about 3.5 million tons of paddy in 1969, up 75 percent in only 4 years. A 6-percent rise in rice production is anticipated in 1970 because of further expansion in plantings of new varieties and fertilizer use. Plantings of IR-8 rice spread to newly irrigated areas in the Sind. The area planted in all IRRI varieties in West Pakistan accounted for about one-fourth of the total rice areas.

Rice production in East Pakistan remained about the same in 1969. Farmers there planted about 700,000 hectares more rice but this was largely offset by flood damage to part of the crop.

Double cropping of rice gained impetus in 1969 through expanded plantings of varieties with a shorter growing season and improved irrigation facilities. About 160,000 hectares were planted to IRRI varieties in East Pakistan in 1969. In late 1969 farmers in East Pakistan received about 450 tons of IR-20 seed from the Philippines. This new variety and IR-22 have greater resistance to diseases which afflict IR-8 during the summer monsoon. They also have favorable cooking and milling characteristics.

The government has used guaranteed procurement prices, subsidized inputs, and farm extension programs to increase rice production. Rice prices in East Pakistan subsided from high levels during the critical months in early 1969. Prices for basmati rice remained at very high levels in West Pakistan, and those for other types of rice changed little. The 1969 procurement price for basmati rice was $196 per ton in West Pakistan, up $38 from 1967. The minimum support price for paddy in East Pakistan increased from $73 per ton in 1967 to $101 in 1969.

Wheat production in West Pakistan was below expectation in the spring of 1969. Dry weather caused a drastic yield reduction on non-irrigated fields. The distribution of some Mexi-Pak seed which had not been tested and certified resulted in lower yields in some areas than during 1967/68. Good yields from about 2 million hectares of high yielding varieties of wheat planted on irrigated land offset the smaller harvest from other areas. Total wheat production in West Pakistan nudged up from 6.4 million tons in 1968 to 6.6 million tons in 1969 despite adverse weather. High yielding varieties were planted on about 2.5 million hectares of 4.2 million hectares of irrigated wheat land during the 1969/70 season. Wheat production in the spring of 1970 in West Pakistan is expected to exceed 7 million tons despite adverse weather during the first half of the growing season. The minimum procurement price for wheat was adjusted upward again in 1969 ($1.87 to $2.12 per bushel). Wheat production in East Pakistan is still relatively small--about 100,000 tons or one-tenth of the area's needs. Recent programs to diversify agriculture in West Pakistan have caused remarkable output gains

corn, peanuts, root crops, fruits, and vegetables. More attention will be focused on livestock enterprises in the Fourth 5-Year Plan (1970/71 - 1974/75).

Good rains in late January 1970 boosted West Pakistan's crops of barley, pulses, tatoes, and winter vegetables in addition to the wheat crop. The upward trend in oduction of many winter crops in West Pakistan has been assisted by technological provements and the use of water stored by Mangla Dam. The production of onions has so doubled in the last decade and a crop of over 220,000 tons is expected the spring of 1970. The production of fruit in commercial orchards increased rkedly in 1969. Since 1963 the production of bananas, dates, mangoes, and peaches s increased markedly in West Pakistan.

To ease the growing shortage of vegetable oils, farmers are encouraged to grow re oilseeds. Production of cottonseed rose 16 percent, but rapeseed was off 11 per- nt. Peanut production increased from 33,000 tons in 1964 to about 175,000 tons in 69. Commercial production of sunflower seed has been encouraged through distribu- on of free seeds by the government. Experiments for growing soybeans were successful ly in some areas near Rawalpindi. Imports of soybean oil into Pakistan may reach 0,000 tons by 1975 because of difficulty in producing enough oilseeds.

Jute production in East Pakistan exceeded 1.2 million tons in 1969 as it did eviously in 1961 and 1967. Floods damaged the jute crop in 1968 more than in 1969. tton production reached a record 583,000 tons in 1969. Yields of cotton have in- eased through the use of more fertilizer, irrigation water, and improved seeds.

Tobacco production in West Pakistan declined slightly in 1968/69 because of poor ainfall in the winter. Adverse weather again hampered production in 1969/70.

Agricultural production in East Pakistan is expected to show promise in 1970 ecause of new seed introductions for many crops in addition to rice and wheat. Since 964 the production of bananas, potatoes, peanuts, pineapples, onions, and citrus uits has increased rapidly.

Many small farmers are growing more cash crops, partly by double cropping land lanted in rice during the monsoon. They are expanding plantings of tobacco, cotton, nillies, and sugarcane. The production of rape and mustard seed, and linseed has ot increased significantly in the last 5 years.

Pakistan's total exports declined about 9 percent in 1969 from the record $720 illion attained in 1968. A decline in the quantity of jute and jute manufactures ex- orted in 1969 was traceable to a drop in production of jute in 1968. The value of hese exports was also down despite rise in export prices. High prices for basmati ice in West Pakistan limited rice exports to the Middle East. Exports of some less mportant items continued upward, including leaf tobacco, household appliances, and ilcake.

Raw cotton exports fell to about half the high level of $100 million recorded in 968. High prices and a fire at Karchi's docks in early 1969 contributed to the de- line. Exports of cotton in 1970 are expected to exceed 155,000 tons. Larger sales o Hong Kong, Japan, and Western Europe are planned. Pakistan's cotton is noted for ts strength. Export prices quoted for Pakistan's medium staple cotton are usually bout a cent per pound higher than those for comparable grades of American cotton.

Sales of jute to Western Europe continued to decline. Total exports of jute declined considerably in 1969 despite large shipments to the USSR and Eastern Europe. Exports of jute products declined slightly; exports of carpet backing to the USA in- creased moderately. Exports of basmati rice are expected to exceed 200,000 tons in 1970 because of larger exports to Kuwait and some other markets in the Middle East.

Pakistan's agricultural imports declined from $204 million in 1968 to $99 million in 1969. By value, soybean oil from the United States was the leading agricultural import in 1969. Imports of wheat for East Pakistan during 1969 were less than 250,000 tons compared with 1.5 million tons in 1968. Imports of fruits into West Pakistan again exceeded $10 million in 1969, including imports of fresh grapes and raisins from Afghanistan and dried dates from Iraq and Iran.

U.S. agricultural exports to Pakistan in 1969 were only $40 million compared with $107 million in 1968. However, shipments are scheduled to rise again in 1970, and exports under P.L. 480 will include over 1 million tons of wheat and 140,000 tons of vegetable oils.

American exports of fertilizer, seeds, pesticides, and other farm supplies to Pakistan are increasing. Total consumption of fertilizer in Pakistan increased from 125,000 nutrient tons in 1965/66 to 369,000 tons in 1968/69. Imports of fertilizer from the United States, USSR, and Western Europe increased, reflecting Pakistan's lagging domestic output.

Trade between West and East Pakistan reached a record in the 12 months ended June 1969. West Pakistan sent about 350,000 tons of rice and 104,000 tons of wheat to East Pakistan in 1968/69. The value of all commodities received by East Pakistan from the west wing in 1968/69 reached $291 million. Some of the leading items were cotton textiles, raw cotton, tobacco, rape and mustard seeds, rice, machinery, and cement. West Pakistan's imports from East Pakistan in 1968/69 were valued at $183 million. The leading items received by West Pakistan were tea, jute products, paper, matches and leather. (John B. Parker, Jr.)

PHILIPPINES

Excellent growing conditions in 1969 succeeded a severe 18-month drought, lifting Philippine agricultural production an estimated 7 percent over 1968. Rice, aided by both better weather and increased plantings of new high yielding varieties, led the advance with a gain of 16 percent to almost 5.2 million tons. Corn, the country's No. 2 staple, went up 14 percent to 1.6 million tons in 1969. Copra and centrifugal sugar, the nation's most lucrative export crops, were slower to recover and their output in 1969 was stagnant.

With continuing favorable weather, and more fertilizer and irrigation, all these crops should show good production gains in 1970. If the harvests live up to early promises, rice imports will continue unneeded and the sugar quota in the U.S. market will be filled. The future of copra is clouded by complications following adoption in February 1970 of a floating foreign exchange rate for the peso which is no longer pegge at 3.9 to 1 dollar. The exchange rate is now determined by market demand, which early this year ranged between 5 and 6 to the dollar.

Philippine finances were under severe strain in late 1969 and early 1970. In the first 9 months of 1969 the government accumulated an unprecedented budget deficit of $167 million, topping the 1968 shortage by 157 percent. The jolt to the economy was compounded by a $208-million deficit in the balance of trade in the first half of 1969. The imbalance and consequent loss of vital foreign exchange came from static export shipments and ever rising imports.

To combat the imbalance of foreign trade, the Central Bank leaned heavily on the new lower floating exchange rate to encourage exports of coconut products (except copra), pineapples, bananas, abaca, and rice if available. Imports in general were discouraged by the lower value of the peso. Restrictions announced in November posed a threat to Philippine imports of agricultural commodities. However, fears of deep

ts in the three largest imports from the United States were eased in March 1970 when e Central Bank notified commercial banks in Manila that no import of wheat, raw cot- n, or leaf tobacco will be permitted except under the United States' CCC export les program. These three commodities together accounted for 62 percent of the value all U.S. agricultural shipments to the Philippines in 1969.

The International Rice Institute announced the naming of two new strains, IR-20 d IR-22. Both are high yielding, more resistant to plant disease, and have better lling and cooking qualities than the IR-8 and IR-5; and both are expected to appeal re to Southeast Asian tastes. The IR-20 will be used where full inputs may not be ovided; the IR-22 where more intensive use of water and fertilizer inputs will be ovided.

Wheat imports slipped off sharply to 550,000 tons in 1968/69 after hitting a record 3,000 tons the previous year. The U.S. share of the market declined slightly to out 90 percent due to increased price competition, particularly from subsidized ench flour and soft wheat. Canada and Australia both launched vigorous trade offen- ves in late 1969 and early 1970 to increase sales of their wheat to the Philippines. th drives were based largely on extension of more favorable credit terms.

Exports of coconut products, top hard-money earners in the Philippines overseas ade, slipped lower in calendar 1969. Shipments of copra fell off to 548,000 tons, wn almost 15 percent from 1968. Coconut oil exports decreased 20 percent to 211,000 ns and desiccated coconuts 30 percent to 50,000 tons. Though prices of coconut prod- ts turned up in the last quarter of 1969, the averages of the year were well below ose of 1968. Production of copra in 1969 was slightly less than in 1968. Production ffered from typhoon damage in 1967 and an exceptionally severe drought with rainfall ff 25 percent all through 1968 and into May 1969. Production could return to the pre- rought level toward the end of this year. However, one feature of the new floating oreign exchange rate for the peso threatens to halt almost all exports of copra be- ause its price balance with coconut oil is disrupted. This exchange decree, issued ear the end of February, required that 80 percent of the dollars earned from copra ex- orts be surrendered to the Central Bank at the old exchange rate of 3.90 pesos per ollar, while all dollar earnings from coconut oil exports can be converted at an ex- hange rate which was about 6.10 pesos to the dollar in mid-March. This level gave oconut oil an advantage of 40 percent. Steps already have been taken to expand do- estic production of oil to capacity. A comprehensive $17-million scheme to modernize he traditional marketing system is progressing rapidly. Development plans include he construction of four additional oil mills and one desiccated coconut plant.

For the third successive year sugar shipments were made just in time to fill the asic Philippine 1969 quota of 1,176,000 short tons in the high-paying U.S. market. t was necessary to borrow approximately 150,000 tons from early harvest of the new rop scheduled for milling and shipment in 1970. More borrowing may be necessary to ake good on the 1970 quota. Dry weather persisting all through 1968 and the first alf of 1969 limited growth and set back the Philippine sugar expansion effort in 969/70. Four of the 14 new mills recently authorized are nearing completion, and an early increase of 700,000 tons a year is expected. Where the surplus will be marketed after satisfaction of domestic and quota needs is not known. More difficult and time- consuming than constructing the mills are the negotiations to induce nearby land holders to grow cane and deliver it to the mills.

Another crop hard hit by the drought was tobacco. The total 1968/69 harvest was reported at about 77,800 tons, down 11 percent from the previous year. In a sense this loss could have been a hidden blessing by helping to reduce a large accumulated surplus of low quality, flue-cured tobacco. However, the low quality tobacco sustained less damage than the high quality. The 1969/70 harvest may be 80,000 tons.

The downtrend in the production of abaca during the previous 5 years continued in 1969 but slowed significantly. Output in 1969 reached only 59,000 tons. The 1968 exports of abaca were 455,000 bales (126.5 kilograms), 17 percent smaller than the previous year. However, domestic consumption increased, due mainly to the development of new uses and the opening of two pulp and paper mills. The generally reduced shipment to overseas markets is attributed in part to the substitution of new fibers for abaca in the making of cordage. The weakening demand in the U.S. market is reflected to some degree by declining prices--from $343 per ton in 1964 to $268 in 1966 and $255 in 1968.

Farm weight of pineapple production increased rapidly to about 400,000 tons in 1968/69 from the previous year's 280,000 tons. Canned pineapples have become one of the 10 principal exports of the Philippines. Shipments overseas in 1968 were between 100,000 and 110,000 tons. They went up perhaps 30,000 tons higher in 1969. The United States is the principal market, taking about 30 percent. Most of the remainder goes to Western Europe with smaller quantities to Japan, Hong Kong, and Canada. (Goodloe Barry)

TAIWAN

Taiwan's total agricultural production in 1969 was unchanged from the previous year. A decline in crop production, due in part to severe typhoon damage, was offset by a gain in meat output. Rice production fell 3 percent to 3.2 million tons and exports during the year reached only 42,000 tons. Sugarcane production dropped to 7.0 million tons in 1969 or 15 percent, and exports of sugar were off even more sharply.

Exports of preserved foods reached the $100-million mark in 1969, and banana shipments gained. Imports of wheat, corn, barley, and soybeans increased sharply in 1969, while cotton was little changed from 1968.

The GNP for 1969 at current prices is estimated at $4.8 billion, up almost 9 percent over 1968. Per capita income gained 5 percent, reaching $258 in 1969. Agricultural production accounted for 21 percent of GNP in 1969, and this share continues to decline while that of industry has risen to one-third.

Gold and foreign exchange holdings at the end of December 1969 totaled $477 million, compared with $381 million a year earlier. Taiwan's foreign exchange position in 1969 was supported by gains in exports, capital investments, and tourism. Tourists brought an estimated $75 million to Taiwan in 1969. The government is supporting investment in construction of modern hotels and in development of national parks and recreational facilities. The investments are expected to boost tourism income by $100 million by the end of 1972.

Taiwan's industrial production increased an estimated 25 percent in 1969. Industrial products accounted for 70 percent of total exports with textile exports representing 23 percent. Industrial development is placing more emphasis on electronics, petrochemicals, shipbuilding, machinery, metals, textiles, plywood, and food processing.

Construction of several irrigation dams continued into 1970. The largest is the Tsengmen Reservoir project, capable of irrigating over 85,000 hectares of rice land when completed in 1973. This irrigation potential is also capable of producing an estimated additional 140,000 tons of rice, and at the same time it will reduce crop losses from flooding. Other reservoirs under construction include the upper Tachien and Hou Lung projects.

Three typhoons near midyear caused considerable damage to food crops. The 1969 rice crop dropped an estimated 3.4 percent to 3.2 million tons. Sugarcane production

reased to 7 million tons in 1969 or 15 percent, due mainly to a drop in planted eage, which in turn reflected low sugar prices at planting time. Any typhoon damage cane will be reflected in 1970 production of sugar as the milling season is in the y months of the year.

Growing conditions were ideal despite slight typhoon damage to fresh vegetables, the 1969 production increased 20 percent to 1.5 million tons. The gain arose in from an increase in area but even more from higher yields. The sweetpotato area anded in 1969 and production rose 7 percent to 3.7 million tons. Typhoons reduced banana and citrus fruit production to 584,000 tons and 168,000 tons respectively. duction of pineapples, tea, pulses, and cassava increased. Mushroom production reased due to the excessively mild winter.

Winter crops are declining in Taiwan, due to low crop prices and higher labor ts. Of the winter crops, only vegetables, tobacco, and pulses have been able to ntain acreage in recent years, while others such as soybeans, rapeseed, tobacco, and at have declined.

Production of rice in 1970 is expected to increase, despite the current rice sur- s. Further increases in production of fresh vegetables and citrus fruits can also expected. Banana production in the first 4 months in 1970 suffered from the effect the 1969 typhoons. The government is encouraging production of soybeans and corn 1970 by restricting winter imports.

Livestock and poultry production benefited from increases in imported coarse ins, and output of meat products increased an estimated 6 percent in 1969. Pork duction increased 5.8 percent to 342,000 tons. With expansion in hog slaughtering, k exports amounted to 6,000 tons in 1969. Frozen pork exports have prospects of rning $25 million a year. Pork exports go mainly to Japan and European countries. ltry production increased 6 percent in 1969, and egg production also gained. The ted Nations Development Program (UNDP) approved a 5-year, $2.3 million project in uary 1969 to establish a research institute in Taipei for improving hog production. e UNDP will contribute $805,000 and the government will furnish the remainder.

Foreign trade continued to expand in 1969. Total value of exports is estimated $1.1 billion, up 29 percent. The United States, Japan, and West Germany are the jor markets for Taiwan's agricultural exports. Export value of canned pineapples, shrooms, and asparagus in 1969 was an estimated $78 million, down 5.8 percent from e previous year. Banana exports the first 10 months in 1969 totaled 347,000 tons, ightly above the total for all of 1968. Sugar exports of 629,000 tons in 1968 were t equaled in 1969, due to a decrease in area, owing to the low sugar prices during e planting season. Exports of sugar the first 10 months in 1969 totaled 402,000 tons. iwan's rice exports in 1969, nearly all to South Vietnam, are estimated at 42,000 ns. Exports have been decreasing primarily because Japan, the largest foreign out- t, has had large crops and so could reduce its imports. After 8 years of negotiations d experiments, Japan agreed to import 500 tons of Taiwan's Ponkan tangerines in 1969. iwan exports annually 10,000 tons of fresh citrus fruits to other Asian countries. her agricultural exports include tea, onions, citronella oil, preserved fruits, canned mboo shoots, vegetables, and ginger roots.

Taiwan's agricultural exports in 1970 may show only modest gains because of typhoon mage and difficulties in expanding or regaining export markets for rice, bananas, nned mushrooms, asparagus, and pineapples. Exports of sugar, bananas, bamboo shoots, d possibly asparagus will show some effects from the 1969 typhoons. To stimulate gging exports of canned foods, the government reduced the surcharge taxes on mush- oms and asparagus exports from 5 percent to 3 percent, effective January 1, 1970.

The government placed a ceiling on imports of corn, wheat, soybeans and raw cott for the period April 1 through December 31, 1969. Port congestion, limited use of foreign exchange, and limited storage and transportation facilities made these ceiling necessary.

Grain imports, mostly wheat and corn, are estimated at 1 million tons in 1969 an are forecast at 20 percent more in 1970. Wheat imports increased substantially in 1969 to an estimated 575,000 tons, including some for feed. About 56,000 tons came f France. Wheat imports are forecast at 530,000 tons in 1970. Corn imports were incre to an estimated 400,000 tons in 1969 to meet demands of the growing poultry and live-stock industries. Thailand was the major supplier. A further increase is expected i 1970. Barley imports in 1969 increased 42 percent to 75,000 tons.

Imports of soybeans were record high at 610,000 tons in 1969, and likely will no maintain this level in 1970. The United States is a major supplier of wheat and soy-beans to Taiwan. Rapeseed imports rose from zero in 1959 to 45,000 tons in 1968, then fell to 20,000 tons in 1969. Canada has supplied the bulk of rapeseed to Taiwan Rapeseed imports have been halted to encourage domestic production.

Taiwan's raw cotton imports for 1969 are estimated at 87,000 tons, about the sam as in 1968. U.S. exports in 1969 totaled 47,000 tons, down 42 percent from the same period in 1968. As the shipping strike curtailed U.S. exports, Brazil and Guatemala made up the difference. Imports of raw cotton may decline somewhat in 1970 because cotton stocks are large and because expansion of overseas textile trade is difficult.

U.S. exports of farm products to Taiwan in 1969 totaled $107 million in 1969 or 8 percent below 1968. The chief items exported were soybeans, wheat, and raw cotton. Lesser items include tallow, corn, nonfat dry milk, tobacco, and vegetable oils. The decline in 1969 reflected much smaller shipments of raw cotton and wheat that were only partially offset by gains in soybeans and tobacco. (Charles E. Goode)

THAILAND

Thailand's good weather boosted agricultural production in 1969. Rice and corn crops are at record levels, and exports should increase moderately in 1970. Kenaf production more than doubled the 1968 low. Rubber output has increased markedly. But the 1969 cotton crop was less than half the 1968 harvest.

Gross Domestic Product (deflated) increased about 7 percent. Although 75 percen of the Thai people make their living from agriculture, agriculture's share in national income decreased from 31 percent in 1966 to 28 percent in 1969. Agricultural commodit continue to provide about three-fourths of Thailand's export earnings.

Thailand has a growing trade deficit. In 1965 imports totaled $736 million, exceeding exports by $114 million. By the first half of 1969 imports had risen to an annual rate of $1.2 billion. This was nearly double the level of exports, and the deficit with Japan alone was greater than the entire deficit in 1965. Exports of im-portant grains did not meet expected levels in 1969 and prices were down.

Despite the trade deficit, several factors have kept the balance of payments favorable in recent years--U.S. military spending, tourism, and foreign investment. Last year these factors failed to maintain a favorable balance. Tourist revenue and foreign investment expenditures continued to rise in 1969, but U.S. military spending decreased by a fourth.

The government of Thailand has initiated policies to combat the trade deficit. For example, export premiums have been lowered to stimulate rice sales. The Thais

negotiating with Japan about their adverse balance of trade and are insisting on ore balanced trade plan. In addition, Thailand is looking for new markets in tern Europe, India, and Africa.

The 1969/70 rice crop is estimated at 13.4 million tons of paddy (8.9 million tons led). Though localized flood damage and losses from pests and disease dimmed earlier spects, both yields and planted area exceeded those of the previous year. Abundant timely rainfall insured a bumper harvest, currently estimated to be second only to t of 1966/67.

Three new rice varieties, developed under the supervision of a private U.S. ndation, were accepted by the rice department in 1969. They are high quality rieties, crosses between native and IR-8 strains, reported to be higher yielding n IR-8 and more resistant to native diseases. They are long grain varieties, two n-glutinous and one glutinous. The government plans for 16,000 hectares to be nted in new varieties next season.

Rice production should increase again next year if weather continues to be favor- le and producer prices maintain their levels. Weather has been unusually good. Area voted to rice cultivation has increased in the past 5 years from 6.5 million hectares 7.5 million hectares and there is some potential for further expansion. Yields ve also increased, from 1.64 tons per hectare 5 years ago to 1.77 tons per hectare 1969/70. Increased use of fertilizer and the development of irrigation projects ve contributed to this yield increase; and further gains are expected.

Rice exports remained stable at 1 million tons in 1969, well below the goal of 4 million tons (table 6). The value of rice exports declined about 20 percent cause of falling prices. Traditional markets, the Philippines and Malaysia, increased eir own domestic supplies and bought less Thai rice while Indonesia received rice der the U.S. P.L. 480 program. In the face of increasing production and declining ports, rice available for domestic use in Thailand has increased more rapidly than pulation. In recent years more rice has been available for nonfood uses. Additional ce is now used for feed in hog and poultry production and in the manufacture of cohol.

Table 6.--Thailand: Supply of rice milled 1964-70

Year	Production 1/	Exports	Available for domestic use
	1,000 tons		
64	7,768	1,896	5,872
65	7,306	1,895	5,411
66	7,113	1,508	5,605
67	8,910	1,482	7,428
68	7,391	1,068	6,323
69 (preliminary)	8,191	1,026	7,165
70 (estimated)	8,851	1,200	7,651

/ Production of preceding year.

There is also a good corn crop for 1969/70. Production rose 13 percent to 1.7 million tons. Exports in 1969 were at 1.4 million tons, slightly less than in 1968. Domestic consumption of corn has increased substantially. Much of this increase has been absorbed by feed mills. The domestic price of corn has been rising and recently moved above the export price. Disagreements about prices between Thai exporters and Japanese importers, combined with heavy demand from other foreign purchasers and increasing demand on the domestic market, have led to non-fulfillments of Japan-Thai cor agreements. Although the share going to Japan will probably continue to decrease, tot 1970 exports of corn from Thailand should rise above last year's level.

Rubber production increased 12 percent to 288,000 tons in 1969. Prices for rubbe on the world market were high in the first half of 1969. Thailand's rubber exports fo the first half of 1969 gained 7 percent in volume over the first half of 1968 while value rose 61 percent. Export prices began to fall again in the second half of 1969. Total exports increased from 252,000 tons in 1968 to an estimated 270,000 tons in 1969

The government took steps last year to encourage production of rubber and rubber products. A government committee increased its contribution to rubber plantation owners 8 percent to $24.33 per acre for replanting. The government also reduced ad valorem duty rates on rubber processing ingredients in order to further stimulate production of rubber products in Thailand. The domestic industry is composed of four companies, two U.S. plants, one Japanese plant, and a Taiwanese plant. Together they use less than 5 percent of the natural rubber produced in Thailand.

Kenaf production increased substantially from a low of 139,000 tons in 1968 to 300,000 in 1969. The increase was spurred by higher prices. Because of the price rise, value of kenaf exports nearly doubled in the first 6 months in 1969, compared to the same period in 1968, although volume of exports in the two periods were about equal Domestic use of kenaf in making gunny bags declined in 1969. With the higher productic of this season, stocks will increase or prices will fall unless Thailand can quickly come up with substantial new markets.

Production of cassava in 1969 was 2.2 million tons, off from 2.4 million tons in 1968. The reduction was largely a reaction to low prices for tapioca products. Exports remained approximately constant.

Thailand and six other Asian countries have formed an Asian coconut community. The community collectively produces 80 percent of world coconut output and is concerned with world trade problems, specifically the restrictive measures of the EEC.

Wheat, tobacco, and cotton are some of the chief commodities that Thailand imports The United States supplies substantial amounts of tobacco and cotton, and a little of the wheat and wheat flour. The value of U.S. agricultural exports to Thailand in 1969 was $32 million.

Thailand's wheat imports (grain equivalent) increased to 62,000 tons in 1969. The U.S. provides only about 15 percent of this market.

Thailand both imports and exports tobacco. Production was 41,000 tons in 1968/69 and is expected to rise to 43,000 tons in 1969/70. Imports are mainly of Virginia leaf principally from the United States. The United States exported $19 million worth of tobacco to Thailand in 1969, a volume of 11,000 tons.

Cotton also is both produced and imported by Thailand. Thailand's cotton crop fell sharply to 12,000 tons (55,000 bales) in 1969. There was a drastic reduction in planted area due to drought and insect infestation. For several years Thailand has imported 100,000 to 115,000 bales of cotton annually, about three-fourths from the United States. In 1968, 95 percent came from the United States. In 1969 U.S. exports

Thailand fell sharply to 43,000 bales, less than a half the level of 1968. Brazil Mexico largely filled the gap by underpricing U.S. suppliers. In the current year orts may rise to 175,000 bales to maintain mill consumption. Although there is a ton development center in Thailand, no solution has yet been found to the problem infestation of Thai cotton, and import requirements should remain fairly high. The suppliers are expected to be more competitive in the Thai market in 1970. Barter tracts have been set up, and more Commodity Credit Corporation and Export-Import bank ancing at low interest rates is being used.

The current Thai development plan (1967-71) is encouraging primary processing. government is interested in attracting industries that would stimulate production processing of agricultural commodities, and those that would produce for export. plan also calls for increases in rural development. The Asian Development Bank is isting in an irrigation project and the establishment of a land bank. The government also encouraging production of new rice varieties and increased use of fertilizer. ncy Hancock)

SOUTH VIETNAM

Agricultural production continues to be disrupted by the activities of the war. pite this, 1969 rice production rose to 5.1 million tons, a gain of 17 percent over 8. The increase was caused by better weather and expanded use of new rice varieties. duction of other agricultural commodities last year was either down or at the same el as the previous year. U.S. agricultural exports to South Vietnam fell to $132 lion in 1969, reflecting a sharp reduction in rice exports to 344,000 tons.

In industry, production of key products such as textiles and cement is up over st year. Construction is also up, but figures net of war destruction are not avail- e. Inflation remains a major economic problem for the government. Increased rice ices were partly responsible for inflation last year. The price increased when the e supply was reduced because the 1969/70 crop was late and import shipments were timely.

The 1969 rice production of 5.1 million tons was the most since 1964. The planted ea was 2.5 million hectares, an increase of 3 percent over the previous year.

The target for the planting of new varieties, IR-8 and IR-5, was 200,000 hectares st year, and at least 174,000 hectares were planted. Large areas were also planted tside the official program. Area planted in new varieties in 1968 was 44,000 hectares. e goal for 1970 is 500,000 hectares; this would increase the area under new varieties 20 percent of total riceland in 1970. The national average yield for the new rieties is 5 tons per hectare, about double that of traditional varieties. Production 1970 should be adequate for domestic needs.

Sugarcane production in Vietnam exceeded 1 million tons in 1965, but has declined astically from year to year; in 1969 it was 350,000 tons of cane (35,000 tons of gar). While sugar production has been decreasing, sugar refining has been increasing. out two-thirds of the raw sugar for refining is imported. Around 100,000 tons of re- ned sugar was processed in 1969.

A program to improve diets by increasing domestic production of animal protein foods as met with some success. Chicken and hog enterprises are expanding sharply in ocations near urban areas. The output of poultry meat and pork is consumed almost ntirely in the domestic market. Imports of feeds, mainly corn, have grown rapidly o support these enterprises. Imports were nearly 60,000 tons in 1969 and may exceed 00,000 tons in 1970. Thailand has supplied a small part of the corn, but most has ome from the United States under P.L. 480.

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Rubber production has fallen consistently since the 1962 output of 78 million tons. Production in 1969 was only 25,000 tons. The causes of the decline are linked to the war; its damage to rubber trees, failure to replant and plant more competitive varieties, and generally high costs because of the war. Seventy-five percent of rubber plantations are French owned, and the French are not investing under these conditions.

South Vietnam's imports far exceed its exports. Rubber is the chief export. Valued at $9.2 million in 1968, it accounted for nearly four-fifths of the total in that year. Small amounts of tea, duck feathers, and fish are usually exported. France is the principal market for Vietnamese exports. Predominant among imports, valued at $466 million in 1968, were industrial products including machinery and consumer goods. Agricultural products comprised about a third of the total.

U.S. agricultural exports to Vietnam were valued at $132 million for 1969. Most of these goods were exported under Title I of P.L. 480. U.S. exports of rice to Vietnam fell again in 1969 to 344,000 tons--off one-third from 1968--but still comprise more than two-fifths of all U.S. agricultural exports to that country. Other major items exported to Vietnam increased in 1969. Flour rose to 145,000 tons, corn to 73,000 tons, cotton to 73,000 bales, and all dairy products to a value of $19 million.

Japan exports to Vietnam about two-thirds as much as does the United States, but few of these exports are agricultural. France, Thailand, Taiwan and Singapore are other important exporters to Vietnam.

Legislation passed in early 1969 provides that land recovered by the government shall remain in the hands of the occupying tenants, that rentals on such land may not be increased, and that payment of back rents may not be required. Land-to-the-Tiller legislation of March 1970 provides for free distribution of land to cultivators. Landlords may retain up to 15 hectares while tenant farmers are to receive grants varying from one hectare in Central Vietnam to 3 hectares in the Mekong Delta. Landowners are to be paid 20 percent in cash and 80 percent in 8-year bonds. (Nancy Hancock)

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HONG KONG'S
XPANDING AGRICULTURAL IMPORTS

PROJECTIONS TO 1980

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ABSTRACT

This report presents the principal commodity supply and demand projecti for Hong Kong and the implications for its foreign trade, particularly with United States. Of major importance are Hong Kong's expanding population, ri ing per capita income, limited farmland, and consequent declining self-suffi ciency in agricultural production. Projections for 1980 made by the Economi Research Center of the Chinese University of Hong Kong indicate that net foo import requirements will increase by 115 percent over the 1964 level.

Key Words: Hong Kong, Projections, Commodities, Import, Export, Consumption

PREFACE

This report summarizes the major findings of a comprehensive study, Lon Term Economic and Commodities Projections for Hong Kong 1970-1980, conducted under contract for the U.S. Department of Agriculture by a team of economist at the Economic Research Center of the Chinese University of Hong Kong under the leadership of Anthony M. Tang, director of the Center. The primary purpose of the study was to determine production, consumption, and import trend of agricultural products in Hong Kong, and to project import demand for 1970, 1975, and 1980. Findings in this study are those of the contractor and do n necessarily coincide with views of the Department. Some of the trends and analyses presented here are based on information from additional sources.

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Washington, D.C. April 1970

SUMMARY

Projections of requirements through 1980 show that Hong Kong's agricultural production will be increasingly unable to meet future expected needs. The Crown Colony's already declining ability to provide its own food will be further aggravated by an increasing population, higher per capita consumption rates, and a great lack of arable land.

Thus, the Colony's self-sufficiency ratio (ability to provide own needs) is expected to drop from 20 percent in 1963 to 16 percent by 1980. As a result, net food import requirements will reach US $569 million (1964 prices) by 1980--an increase of 115 percent over 1964.

Using 1962-64 as a base period, the projections indicate the following anticipated increased demand for specific commodities in 1980: rice, peanuts, soybeans, and vegetable oils--up 65 percent; wheat flour, lard, and tallow--up 110 percent; wheat, vegetables, fruits, meats, and dairy products--up 140-170 percent.

Higher per capita consumption rates account for much of the anticipated greater demand. Per capita consumption of rice, peanuts, soybeans, and vegetable oils is expected to increase by over 21 percent; lard and tallow, 37 percent; fruits and vegetables, 66 percent; meats and dairy products, 75 percent; and so on.

The traditionally strong position of the United States in satisfying Hong Kong's food needs is expected to continue, but the role of Mainland China as a food supplier will grow in importance.

HONG KONG'S EXPANDING AGRICULTURAL IMPORTS
PROJECTIONS TO 1980

by

Amjad H. Gill, Agricultural Economist
Foreign Regional Analysis Division
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ECONOMIC PROJECTIONS

opulation

In 1946, Hong Kong had 1.5 million people. By 1950, the population had umped to 2.3 million and was fairly stable until 1955, when it was 2.4 million. ince 1959, however, the birth rate has declined. In 1959, there were 104,579 irths, in 1962, 111,905, and in 1965, only 102,195. In 1960, the population as 3.1 million and by 1965, there were 3.7 million people. The projected opulation of Hong Kong will be 4.0 million in 1970, 4.5 million in 1975, and .2 million by 1980. Immigration from Mainland China has boosted population rowth, particularly between 1946-50 and 1955-60. In the future, immigration hould decline as a factor in population growth, barring any unexpected poli- ical developments.

mployment Structure

The employment structure in Hong Kong has several distinct features: a ide age range of employees, a high percentage of female workers, and a high ercentage of industrial workers. Often, among poorer families, children aged 6 and over are employed at least part time. Forty-seven percent of Hong Kong's omen were employed in 1961. This was the highest percentage in the world, ex- cept for Japan, where 55 percent of the women were employed in 1960. Further- more, the percentage of female employment in Hong Kong has probably risen even igher since 1961 due to the expansion of the electronics, plastics, and garment industries.

The number of agricultural workers is very small--only 47,223 full-time farm workers out of a total population of just over 3 million (1961 census). Most people are employed in either manufacturing or service industries. Of the 1961 labor force, 40 percent were employed in manufacturing, 44 percent in

services such as commerce, utilities, etc., and 8 percent in building and construction. According to the study, total employment projections for Hong Kong are as follows:

Year	Total employment
1970	1.8 million
1975	2.1 million
1980	2.5 million

Trade

Outside influences have changed Hong Kong from an entrepot to an industrialized economy. The Crown Colony has become increasingly dependent upon imports of raw materials and food for domestic consumption.

Mainland China supplied 20 to 25 percent of Hong Kong's food and other essentials in 1952-65. Western Europe's share of the Hong Kong import market was 30 percent in 1952. By 1965, Western Europe's share dropped to 22 percent. Imports from the developing countries in 1952 were 24 percent and by 1965 had dropped to 18 percent. Mainland China's share of Hong Kong's imports has remained at around 20 to 25 percent. The U.S. share of Hong Kong's imports increased from 6 percent in 1952 to 12 percent in 1965. In terms of dollar value, the U.S. share of Hong Kong's imports in 1952 was $39.8 million of a total import value of $663 million, while in 1965 the U.S. share rose to $188.7 million of a total import value of $1,572.8 million.

While 18 percent of Hong Kong's total exports went to Mainland China in 1952, the share had dropped to 4 percent by 1965. The Crown Colony's exports to Japan dropped from 4 percent in 1952 to 3 percent by 1965. Hong Kong's trade with Mainland China and Japan is unbalanced in their favor. It has made up this unbalance with exports to the United States and Canada, which increased from 5 percent of the total in 1952 to 37 percent in 1965.

In 1962-64, Hong Kong met only 19 percent of its food requirements from local production. Owing to population increase and rising per capita consumption, it is projected that by 1980 Hong Kong will be able to produce only 16 percent of its food needs. Net imports are projected to rise from a base of $265 million in 1964 to $315.6, $406.1, and $569 million in 1970, 1975, and 1980, respectively. 1/

AGRICULTURAL PROJECTIONS

Agricultural Economy

In Hong Kong, agricultural production is but a small segment in the economy, accounting for a little over 3 percent of the gross domestic product and

1/ All values in US$.

ying less than one-fifth of the food requirements. Agricultural produc-
relative to manufacturing and service industries delined steadily in the
decade.

Geography is the main factor restricting the expansion of agriculture in
Kong. The Crown Colony has a total land area of only 398.5 square miles.
is, 13.2 percent, or 33,900 acres, is agricultural land, 81 percent is
able, and about 6 percent is urban and industrial land.

Future demand for food must rely more on imports. The study projects a
in total food consumption from $297,000 in 1962-64 to $637,000 by 1980,
rise in import requirements from $240,000 in 1962-64 to $532,000 by 1980,
on 1964 prices (table 1).

Hong Kong's rice production declined from 35,575 tons of paddy in 1953 to
00 tons in 1965, a decline of 4.4 percent annually. 2/ Hong Kong imports
97 percent of domestically consumed rice, mostly from Mainland China and
and. Rice prices are government-controlled.

In 1953-64, rice consumption increased from 236,000 to 385,000 tons, a
of about 65 percent. In the same period, population increased about 60
ent; per capita consumption rose from 225 to 235 pounds.

The quality of rice consumed has been upgraded, reflecting rising incomes.
ng 1958-64, consumption of top-grade rice increased from 28 to 48 percent
he total, while consumption of low-grade rice decreased from 37 to 17 per-
.

Rice consumption per capita is projected to rise from 232 pounds in 1962-
248 and 264 pounds in 1970 and 1980. Total imports are projected to rise
358,000 tons in 1962-64 to 440,000 and 617,000 tons in 1970 and 1980.

t and Wheat Flour

Wheat products are second in importance to rice in Hong Kong as shown in
cost-of-living survey for 1964. The typical Hong Kong household spent 5.5
ent of its income on rice and 2.6 percent on wheat products. Wheat imports
sharply from 272 tons in 1952 to 73,000 tons in 1965, owing to the growth
he flour milling industry. As the domestic milling industry expanded, com-
ial imports of flour in Hong Kong slowed down. In 1952, Hong Kong imported
00 tons of flour, but in 1965 imports dropped 23,000 tons.

Per capita consumption of wheat rose from 32 to 52 pounds in 1952-65, re-
ting an increase in real per capita income. The U.S. share of the wheat
et declined from 20 percent in 1952-54 to 5 percent in 1962-64. Australia
he major supplier of wheat for Hong Kong's domestic consumption. The United
es supplied 19 percent of Hong Kong's flour in 1952-54 and 10 percent in

---

All tons refer to metric tons.

1962-64. Canada is the principal supplier of flour. Japan is a newcomer to the Hong Kong flour import market.

Flour consumption per capita is projected to rise from 57 pounds in 196 64 to 71.0 in 1970 and to 88.5 pounds in 1980. Total consumption of wheat flour is projected to rise from 91,000 tons in 1962-64 to 130,000 and 211,00 tons in 1970 and 1980. Wheat imports can be expected to increase from 80,40 tons in 1962-64 to 130,000 and 197,000 tons in 1970 and 1980--up 140 percent from 1962-64 to 1980. Imports of wheat flour are expected to increase from 33,000 tons in 1962-64 to 45,000 and 70,000 tons in 1975 and 1980. Imports o wheat flour will not show as much increase as imports of wheat because more wheat is being milled into flour in Hong Kong.

Vegetable Oilseeds and Oils

The main oils imported for domestic consumption are peanut and soybean oils. Others, such as flaxseed, linseed, and rapeseed oil are consumed in small quantities. No oilseeds are produced in the Crown Colony.

Peanuts.--During 1952-65, Hong Kong imported about 10,400 tons of peanut annually without showing any apparent trends. As imports fluctuated, peanut use for livestock feed rose from 6,700 tons annually in 1953-55 to about 10,8 tons during 1961-63, an increase of 60 percent. Per capita consumption increased from 6.5 to 7.0 pounds. An additional increase by 1980 is projected. Total consumption is projected to increase by 67 percent, from about 10,900 tons in 1961-63 to 18,200 tons by 1980.

Soybeans.--The principal sources of soybean imports have been Mainland China, the United States, Thailand, Cambodia, and Taiwan. Imports declined from an annual average of 22,000 tons in 1953-56 to 20,000 tons in 1961-64, while consumption rose from 8,300 to 11,600 tons. This reflects a decline in Hong Kong's reexport market of soybeans. Total consumption shows a rise of 4 percent in the 1953-56 to 1961-64 period.

Projections indicate an increase of 13 percent in per capita consumption of soybeans from 1962-64 to 1980, from 7.20 to 8.16 pounds. Total consumptio is projected to show a rise of 65 percent from 11,800 tons in 1962-64 to 19,5 tons in 1980.

Soybean and peanut oils.--Imports of soybean oil tripled from 1952 to 19 rising from 4,120 to 14,200 tons. During the same period, peanut oil imports declined from 17,000 to 10,400 tons, a drop of 40 percent. Peanut oil consumption fell from 9,800 in 1953 to 6,940 tons in 1964. Soybean oil consumption rose from 1,160 to 18,100 tons in the same period, an increase of 57 percent. Per capita consumption of soybean oil went up ninefold from 1.13 to 10.42 pounds in the same period. The United States supplied 93 percent of all soybean oil imported by Hong Kong in 1962-64. Hong Kong also imports other vegetable oils in small quantities.

Vegetables

During 1953-55, Hong Kong was 65 percent self-sufficient in vegetable pr duction with an output of 95,000 tons. By 1963-65, production reached 171,70

ons, an increase of almost 80 percent from the 1953-55 level. In the meantime, total consumption of vegetables rose from 211,000 tons in 1953 to 508,400 tons in 1965, an increase of 140 percent. Per capita consumption increased from 205 to 326 pounds during the same period. Because of growing per capita consumption and increasing population, local production accounted for only 40 percent of consumption in 1965.

Hong Kong is expected to produce 242,000 tons of vegetables in 1970, 290,000 tons in 1975, and 337,000 tons by 1980. Even though production will double, Hong Kong will have to double its imports to meet the rising per capita consumption. Total consumption is projected to rise very sharply from 424,000 tons in 1962-64 to 632,000 and 1,037,000 tons in 1970 and 1980. Hong Kong imported 255,000 tons of vegetables in 1962-64, and it is expected to increase from 347,000 tons in 1970 to 700,000 tons by 1980.

The major supplier of fresh vegetables to Hong Kong is Mainland China, whose share of vegetable imports ranged from 49 percent in 1961 to 78 percent in 1964. Other suppliers are Japan and Taiwan. The United States supplied 1.3 percent in 1952 and 3.7 percent in 1962-64.

Fruits

Hong Kong grows less than 5 percent of its fresh fruit requirements. During 1953-65, production almost doubled, rising from 1,400 tons to 2,600 tons. Fruit consumption is increasing at an average annual rate of 9.2 percent. Consumption rose from 72,800 tons in 1953 to 188,600 tons in 1965, showing an increase of 160 percent from 1953 to 1965. Per capita consumption rose by 70 percent from 67.3 pounds in 1953 to 114.1 pounds in 1965.

In 1953, Hong Kong imported 71,400 tons of fresh fruits, 50 times more than the domestic production and by 1965, Hong Kong imported more than 71 times the domestic production. Hong Kong's imports rose from 71,400 to 186,000 tons from 1953 to 1965.

The United States has been the principal supplier of fresh fruits, accounting for about 40 percent of the total value of imports since 1960. Mainland China is also a major supplier.

Local production of fruits is projected to increase from an annual average of 2,100 tons in 1962-64 to 3,870 and 4,416 tons in 1975 and 1980. Demand for fruit is expected to rise from 99 pounds per capita in 1962-64 to 127 in 1970, and to 164 pounds by 1980. Hong Kong's imports of fruits are projected to rise from 158,000 tons in 1962-64 to 229,000 and 385,000 tons in 1970 and 1980.

Milk and Milk Products

Hong Kong produced enough milk to satisfy 17 percent of its domestic consumption in 1965, and imported the rest. During 1952-65, Hong Kong increased its domestic production of milk from 4,100 to 8,100 tons, an increase of 75 percent. In the same period, Hong Kong's consumption of milk rose from 13,900 to 41,800 tons, an increase of 200 percent. Per capita consumption increased from 14.35 pounds in 1952 to 24.21 pounds in 1965.

To meet the rising demand for milk, Hong Kong's imports advanced from 10,500 tons in 1952 to 33,700 tons of fluid milk equivalent in 1965. It is expected that domestic production of milk will increase from 5,500 tons in 1962-64 to 6,900 tons in 1970, and to 8,400 tons by 1980. Expansion of the dairy industry is hampered by the high cost of imported cattle feed.

The Netherlands accounted for 60 percent of Hong Kong's imports of dairy products in 1952-65. The remaining 40 percent was supplied by the United States, Australia, Canada, and the United Kingdom.

Domestic demand for milk and dairy products is projected to rise from 39,400 tons in 1962-64 to 59,000 and 102,000 tons in 1970 and 1980. Hong Kong's self-sufficiency will fall, and the difference will be made up by imports. Projections indicate that imports will rise from 33,900 tons of fluid milk in 1962-64 to 69,500 and 94,100 tons in 1975 and 1980.

Meat

In 1952-65, Hong Kong's meat production rose from 10.4 million to 49.8 million pounds. Still the Crown Colony is only about 15 percent self-sufficient in meat. Poultry and pork are the main items of local production. Cattle production is quite limited because of the lack of pastureland and the high cost of imported feed.

Hong Kong's meat consumption rose from 44,000 tons (live weight carcass) in 1952 to 183,000 tons in 1965, an increase of 310 percent . Per capita consumption increased from 46 to 106 pounds in this period. Imports of meat and meat products in 1952-65 rose from 41,000 to 168,000 tons (carcass weight). Most of the import was in poultry and pork.

The U.S. share of the Hong Kong meat import market increased from 0.13 percent of the total in 1952-54 to 4.57 percent in 1962-64. Most of the increase is in the form of U.S. frozen poultry, which is very popular. The value of U.S. frozen poultry shipped into Hong Kong rose from $2.1 million in 1959 to $3 million in 1964. The United States accounts for 70 percent of all frozen poultry shipped into Hong Kong.

Meat consumption is projected to increase from 138,000 tons in 1962-64 to 271,000 and 359,600 tons (carcass weight) in 1975 and 1980. Per capita consumption of meat will rise from 85.7 pounds in 1962-64 to 132 in 1975, to 150.8 pounds in 1980.

Hong Kong's import requirements for meat and meat products in carcass weight, projections show, will rise from 115,000 tons in 1962-64 to 173,700 and 230,000 tons in 1970 and 1975, and will reach 310,000 tons by 1980. In 1964 import prices, the value of net import requirements is expected to increase from a base value of $57.6 million in 1962-64 to $95, $127.4, and $172.4 million in 1970, 1975, and 1980, respectively. The percentage increase between 1962-64 and 1980 will 148 percent.

cco

Tobacco leaf is not grown in Hong Kong, so domestic demand is met by im-
s. Hong Kong's total imports rose from 6.7 million pounds in 1955 to 16.9
lon pounds in 1965, an increase of more than 150 percent. Along with the
ease of imports, domestic cigarette consumption per capita rose from 2,726
958 to 3,325 pieces in 1965.

Chief supplier of leaf tobacco is the United States, whose exports to
Kong rose from 3.8 million pounds of tobacco in 1955 to 8.1 million pounds
965, an increase of 110 percent. Tobacco leaf from the United States is
nsive, but is the overwhelming favorite. Prices of U.S. tobacco range from
to $0.70 per pound, compared with $0.44 to $0.53 per pound for total im-
s of tobacco leaf. Since 1960, the United States has supplied about 40
ent of Hong Kong's tobacco, or about 60 percent in terms of total value.
esia, India, and Mainland China are the other major suppliers.

Reexports do not figure into the projection because in recent years they
declined to an insignificant amount. Hong Kong is one of the world's
est consumers of cigarettes. The demand for imported tobacco is projected
lse from 18.4 million pounds in 1962-64 to 19.2 and 23.1 million pounds in
and 1980.

on

Cotton is an imported commodity in Hong Kong. Only negligible quantities
mports are reexported as raw cotton. Import statistics reflect development
ne local spinning industry. In the early 1950's, the spinning industry ex-
ed rapidly. Spindleage increased at an average of roughly 11 percent per
in 1952-64, but there were considerable fluctuations during this period in
rate of investment in the industry. In 1947, Hong Kong had only 5,000 spin-
. By 1965, there were 710,000 spindles.

Cotton imports paralleled the increase of spindleage, rising from 38,300
in 1953 to 133,500 tons in 1965. Major suppliers of cotton in 1965 were
Jnited States with 28 percent, Brazil with 19 percent, and Pakistan with
ercent. The garment industry does not influence cotton imports because
of its needs are met by imported cloth.

The Hong Kong garment industry has expanded tremendously since its estab-
ment in 1955. The number of workers increased from 7,000 in 1955 to 49,000
964. The total value of textile exports rose from $59 million in 1955 to
.5 million in 1964. Over 95 percent of the output is exported. The export
otton piece goods (textiles) increased from about $76,000 in 1961 to $95,000
965. The textile export market for Hong Kong after the United Kingdom is
Jnited States, whose imports of Crown Colony textiles increased from $14,700
961 to $20,300 in 1965. Other major importers of Crown Colony textiles are
ralia and New Zealand.

The projected import requirement for raw cotton will rise from an average
19,000 tons in 1962-64 to 161,000 and 216,000 tons in 1970 and 1980.

Lard and Tallow

Consumption of lard and tallow in Hong Kong is small relative to that o other edible oils. Domestic production of lard and tallow is limited to the byproducts of local slaughter of hogs. Production of lard per hog is only about 5 pounds because of each animal's extremely small slaughter weight--ab 85 to 90 pounds. Production of lard rose from 1,610 tons in 1952 to 4,848 tons in 1965, almost 200 percent. Nevertheless, Hong Kong's domestic produc tion of lard is inadequate to meet the demand. Hong Kong's consumption in 1952-65 rose from 2.93 to 4.53 pounds per capita.

In 1952-64, Hong Kong's imports of lard rose from 572 to 1,745 tons. T Netherlands was the largest supplier of lard and tallow with almost 50 perce of the total import. It is projected that Hong Kong will increase imports from 3,600 tons in 1962-64 to 4,679 in 1970 and 7,570 tons by 1980. With ri ing production and rising imports, future consumption will increase from 7,8 tons in 1962-64 to 10,400 and 16,000 tons in 1970 and 1980.

ROLE OF U.S. EXPORTS IN HONG KONG

The Crown Colony is a very promising cash market for U.S. farm commodi- ties. Despite the distance and shipping expenses, the U.S. agricultural pro duct exports are expanding yearly (table 2). In 1968, U.S. exports of major commodities were about $71 million, up about $11 million from 1967 and $25 m lion higher than the 1960-62 average.

The United States is the major supplier of raw cotton to Hong Kong. Ex ports of raw cotton reached an all-time high of $32 million in 1968, up $15 million from 1967 and $12 million more than the 1960-62 average.

Despite the high price, exports of U.S. leaf tobacco are increasing ste dily. In 1968, exports rose to $4 million, almost $300,000 more than 1967 a about $700,000 higher than the 1960-62 average.

Exports of U.S. wheat and wheat flour totaled about $2.4 million in 196 up about 34 percent from 1967 and 50 percent higher than the 1960-62 average Owing to a short crop of rice in Thailand in 1967, U.S. rice exports reached a record high of $10 million. In 1968, Hong Kong imported less rice from th United States than in 1967 but, at a value of $6.6 million, it was still mor important than all other commodities except raw cotton.

U.S. exports of vegetable preparations and vegetable oils to Hong Kong were valued at $3.1 million in 1967, and at about $3 million in 1968. Soybe and its products constituted a major part of this export.

The uptrend in export of fruits and fruit preparations was expected to resume in 1969. Export of U.S. fruits and fruit preparations in 1968 were lower than the 1967 level because of the small citrus fruit crop in the Unit States. Exports of U.S. poultry and meat were at a record high in 1967, abo $4 million and $3.4 million in 1968. Prior to 1968, the United States was t

or supplier of poultry and meat, but in that year, Mainland China overtook United States and cut into its share of the market.

Exports of U.S. dairy products to the Crown Colony have been rising very adily for the last few years. In 1968, dairy exports were valued at about 5 million, up $200,000 from the 1967 level and about $500,000 higher than 1960-62 average.

Even though Mainland China is the major competitor, the United States ll occupies a prominent position in the Hong Kong market. The Colony's anding economic development and its increasing population and rising per ita income give encouragement to a continued strong market for agricultural modities. Especially promising for the United States are fruits, powdered k, frozen poultry, soybean oil, leaf tobacco, and raw cotton. U.S. exports generally on an upward trend, and it is expected that U.S. exports to the ony will increase.

Table 1.--Hong Kong: Domestic production, import requirements, per capita demand for specific commodities, 1962-64 average, projections for 1970, 1975, and 1980

	Rice	Wheat flour	Peanuts	Soybeans	Vegetable oils	Vegetables	Fruits	Meats	Dairy products	Lard and tallow
Production	1,000 tons									
1962-64	14.5	---	---	---	---	170.0	2.1	22.7	5.5	4.3
1970	9.1	---	---	---	---	242.2	3.3	33.6	6.9	5.8
1975	9.1	---	---	---	---	290.0	3.9	41.3	7.6	7.1
1980	9.1	---	---	---	---	337.4	4.4	49.4	8.4	8.4
Import requirement	1,000 tons									
1962-64	358.0	114.0	11.0	11.8	30.4	255.0	157.5	115.2	34.0	3.6
1970	440.0	166.0	13.1	14.0	38.0	374.0	228.8	173.7	52.1	4.6
1975	515.0	210.0	15.3	16.3	45.4	504.3	295.4	230.4	69.5	5.7
1980	617.0	267.0	18.2	19.5	54.9	699.3	385.6	310.2	94.1	7.6
Per capita demand	Pounds									
1962-64	232	57	6.8	7.2	19	262	99	86	24.4	5.0
1970	248	71	7.2	7.7	21	338	127	114	32.3	6.0
1975	257	80	7.4	7.9	22	386	145	132	38.0	6.0
1980	264	88	7.7	8.2	23	435	164	151	43.0	7.0

Table 2.--United States: Agricultural exports to Hong Kong by value and major commodities, 1960-68

Product	Average 1960-62	1960	1961	1962	1963	1964	1965	1966	1967	1968
					$ 1000					
Wheat and wheat flour	1,593	1,585	1,160	1,585	1,865	1,367	1,153	1,791	1,785	2,396
Rice	1,588	2,715	2,028	20	21	49	1	128	9,952	6,603
Vegetable fats and oils	2,925	883	1,727	6,164	3,525	6,532	3,580	741	1,391	1,272
Vegetable preparations	1,032	942	1,031	1,123	1,175	1,366	1,466	1,621	1,701	1,588
Fruits and preparations	5,649	4,767	5,036	7,145	7,134	8,212	8,491	8,661	9,582	7,596
Poultry meats	2,721	2,200	3,203	2,760	2,750	3,172	2,679	3,264	3,950	3,374
Dairy products	994	1,026	1,096	859	966	925	891	1,192	1,278	1,482
Cotton	19,639	23,703	24,193	11,022	12,836	16,722	20,392	14,344	17,402	31,865
Tobacco	3,630	2,410	4,342	4,137	5,340	4,938	5,152	3,254	4,074	4,342
Other 1/	5,392	4,995	5,523	5,659	6,513	6,571	6,654	8,584	8,646	10,024
Total	45,163	45,226	49,789	40,474	42,125	49,854	50,459	43,580	59,761	70,542

1/ Includes food for relief or charity, feeds and fodders, field and garden seeds, coffee, hops, essential oils, sugar and related products, and domestic animals.

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JAPANESE EFFORTS TO Diversify Sources OF AGRICULTURAL IMPORTS

ECONOMIC RESEARCH SERVICE·U.S. DEPARTMENT OF AGRICULTURE·ERS-FOREIGN 297

ABSTRACT

Japan, the leading foreign market for American farm products, has developed a long-term policy of diversifying sources of its agricultural imports t hedge against supplies being reduced or shut off from major sources and to en courage other countries to purchase Japan's industrial products. Programs ar underway for assisting developing countries to increase agricultural production. Implementation is primarily through Japan's foreign aid programs--both government and private enterprise participate.

The commodities on which most emphasis is being placed are corn, grain sorghum, cassava (for animal feed), oilseeds, tropical fruits, and silk. Pro grams are underway in all developing regions of the world. Currently, the mo ambitious programs are in Southeast Asia. By 1975, it seems reasonable to ex pect that Southeast Asia will be exporting to Japan 1.5 million to 2.0 millio metric tons of corn and 200,000 to 300,000 tons of grain sorghum. A roughly equivalent amount of grain sorghum may be moving from Australia to Japan. Other items that are expected to show a significant increase in volume of imports by Japan by 1975 include dried cassava, tropical fruits and fruit products, raw silk, cotton, and tobacco.

Key Words: Japan, Southeast Asia, Japanese aid programs, U.S. agricultural trade, Japanese agricultural trade, world agricultural trade

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HIGHLIGHTS

Japan is a leading foreign market for American farm products, importing out $1 billion of U.S. agricultural commodities in 1968. Among the most portant of these commodities were wheat, corn, grain sorghum, tobacco, cattle des, lemons, alfalfa meal, soybeans, cotton, and tallow.

However, the U.S. share of the market has declined and was only 30 per- nt of total imports in 1968, compared with 34 percent in 1965. Competition om other foreign producers is on the increase, as Japan vigorously pursues s policy of diversifying the sources of its farm product imports.

Japan's economic well-being is highly dependent on foreign trade--in par- cular, the export of industrial goods. In 1968, total exports and total im- rts each approximated $13 billion; imports of agricultural products totaled .4 billion. The United States is Japan's most important trading partner, llowed by the South and Southeast Asia region. Japan maintains a favorable ade balance with each. However, countries of South and Southeast Asia want pan to take more of their farm products, to reduce their unfavorable trade lances with Japan.

Japan has developed a long-term policy of diversifying sources of its rm product imports to hedge against supplies from major sources being re- ced or shut off and to encourage other countries to purchase more of its dustrial products. Programs have been initiated for actively helping de- loping countries, particularly those in Southeast Asia, increase their ag- cultural production. Emphasis is being placed on producing the farm commo- ties that Japan needs to import and helping recipient countries attain self- fficiency in food production. The policy is implemented primarily through apan's foreign aid programs. The Government of Japan and private Japanese nterprise actively participate and cooperate in carrying out overseas develop- ent projects. Increased production of farm products for export to Japan can us be expected.

Volume increases will be small for the next year or two but will grow re rapidly thereafter. By 1975, the competitive effect of the overseas de- lopment projects just starting can be expected to reach significant levels in apanese markets for a few American farm products.

Most emphasis is being placed on such commodities as corn, grain sorghum, assava (for animal feed), oilseeds, tropical fruits, and silk. Programs are nderway in all the less developed regions of the world; however, the most mbitious programs for production of these commodities are currently in the outheast Asian countries--particularly Indonesia, Thailand, and Cambodia--and ustralia. It seems reasonable to expect that by 1975, Southeast Asia will be xporting 1.5 million to 2.0 million tons[1/] of corn to Japan, and between

1/ Tonnages in this report are metric.

200,000 and 300,000 tons of grain sorghum. A roughly equivalent amount of grain sorghum may be moving from Australia to Japan. Exports from Southeast Asia to Japan of dried cassava for use in mixed feeds will probably be many times the 1967 level of only some 10,000 tons. Oilseeds may eventually represent a major item of trade, but until the mid-1970's, it seems unlikely that oilseed production in Southeast Asia will expand to a point where it wi have a significant impact on the Japanese market. A very substantial increa in exports of South and Southeast Asian tropical fruits and fruit products t Japan can be expected by 1975. There should be a large increase in exports raw silk from Southeast Asia. Exports of cotton and tobacco from South Asia are expected to increase by 1975.

JAPANESE EFFORTS TO DIVERSIFY SOURCES OF AGRICULTURAL IMPORTS

by

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INTRODUCTION

Japan's desire to diversify the sources of farm products it imports has wo principal roots. Despite its success as a trading and manufacturing nation nd the development of a very high level of agricultural technology, owing to a carcity of farmland, Japan lacks sufficient supplies of agricultural products o serve its population. As a consequence, the Japanese have turned to trade s a means of obtaining the necessary commodities; in this, they have been all oo successful in maintaining a favorable balance of trade. As a result, many nderdeveloped countries have been considering restrictions on imports from Jaan if the balance so unfavorable to them is not redressed. One way for the apanese to help redress this balance is to encourage production of needed gricultural products for which Japan can exchange its manufactured goods. rograms to expand agriculture in these countries also serve the Japanese desire o escape dependence on a limited number of suppliers, who might be cut off by ar, crop failure, or other events.

Japan's programs to develop new sources for its imports of farm products nd to increase productivity and crop variety in older ones has aroused conern among American exporters of farm products. This concern has led to an aprehension that as a result of these developments the United States might face ncreasing difficulty in maintaining its preeminent position in Japan's market or farm products. Despite this concern, however, no attempts had been made to ompile and analyze the information available about the nature and extent of urrent programs.

This report serves to fill this gap by describing the major Japanese prorams, Government and private, being undertaken and putting them into some sort f perspective. It is concerned primarily with the principal countries benefitting from the programs and the programs' effect on the ability of these ountries to increase exports to Japan. Emphasis is placed on those commodiies that Japan imports in bulk from the United States.

FOREIGN TRADE

Japan, with its population of 102 million, provides one of the world's leading markets for imported farm products. Except for a skilled, educated, disciplined, and industrious work force, the country has relatively few resources--including agricultural resources. Thus, a high level of foreign tra is vital to the well being of the nation's economy. With one of the highest economic growth rates in the world, Japan has become increasingly important a an importer and exporter. In recent years, Japan's gross national product ha been expanding at a real rate of about 12 percent a year and in 1968 was exceeded only by that of the United States and the Soviet Union.

In 1968, continuing a steady rise, Japan's total imports were close to $13 billion (table 1). Exports were also about $13 billion, reflecting the country's efforts to balance import and export trade each year. Approximatel 94 percent of Japan's total exports were manufactures or processed products, while agricultural products made up 26 percent of total imports.

The United States is Japan's most important trading partner. In 1968, exports to the United States totaled $4.1 billion, 32 percent of total exports; imports from the United States were valued at $3.5 billion, 27 percent of total imports. Until very recent years, the balance of trade between

Table 1.--Japanese foreign trade, by area, averages 1955-64, annual 1965-68

Year	United States	South and Southeast Asia	Other	Total	As percentage of total: United States	As percentage of total: South and Southeast Asia
	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol.	Pct.	Pct.
Exports:						
Average--						
1955-59	663	679	1,398	2,741	24.1	24.8
1960-64	1,384	1,140	2,543	5,066	27.3	22.5
1965	2,479	1,618	4,355	8,452	29.5	19.1
1966	2,969	1,799	5,008	9,776	30.4	18.4
1967	3,012	1,919	5,511	10,442	28.8	18.4
1968	4,086	2,255	6,631	12,972	31.5	17.4
Imports:						
Average--						
1955-59	1,125	615	1,584	3,323	33.8	18.5
1960-64	1,972	908	3,240	6,123	32.2	14.8
1965	2,366	1,126	4,677	8,169	29.0	13.8
1966	2,658	1,315	5,550	9,523	27.9	13.8
1967	3,212	1,489	6,962	11,663	27.6	12.8
1968	3,527	1,642	7,818	12,987	27.2	12.6

ne United States and Japan was in favor of the United States. In 1968, however, the balance was nearly $0.6 billion in Japan's favor.

The South and Southeast Asia region ranks next in importance among Japan's rade partners. In 1968, exports to the region totaled $2.3 billion--17 percent of total exports. Imports were valued at $1.6 billion, nearly 13 percent f the total. Japan's favorable trade balance with South and Southeast Asia as been widening year by year.

Favorable trade balances with the United States and the South and Southast Asian countries make it possible for Japan to import more from the rest of he world than it exports. In 1968, exports to all other regions totaled $6.6 illion, while imports totaled $7.8 billion.

Japan's imports of agricultural products totaled $3.4 billion in 1968 table 2). Imports of U.S. farm products accounted for about $1 billion. mong the most important items from the United States were wheat, corn, grain orghum, lemons, alfalfa meal, tobacco, cattle hides, soybeans, cotton, and allow. South and Southeast Asian countries also supply several of these commodities, including corn, grain sorghum, tobacco, and cotton (table 3). Other eading farm imports from South and Southeast Asia include rice, pulses, rubber, opra, palm kernels, cottonseed, castor oilseed, sesameseed, kapokseed, jute, nd abaca.

Because it relies so heavily on foreign trade, Japan has an unusually strong incentive to buy farm products where the purchases will help expand and diversify markets for its exports, largely manufactures. This incentive is most likely to influence buying decisions where the seller has an unfavorable balance of trade with Japan and where Japan has strong, long-term ambitions as a supplying nation. This is the situation in trade with the countries of South and Southeast Asia. A number of these countries have sought to have Japan purchase increased quantities of their products. Most have little to export other than farm products. Increasingly, Japan faces import restrictions against her products unless the trade gap can be narrowed by increased Japanese purchases of farm products.

It has long been the policy of Japan to diversify sources of imports as a hedge against the possibilities of supplies from major sources being reduced or shut off because of such events as wars, crop failures, strikes, and breaks in diplomatic relations. Another reason for the policy is Japan's desire to improve its bargaining position with exporting nations.

In the last few years, Japan has developed a policy of actively helping less developed countries to increase production of farm commodities that it needs to import. This policy is implemented through Japan's economic and technical assistance programs. Japanese private enterprises are being encouraged to take part in this effort along with Government agencies. Countries in all of the underdeveloped regions of the world are involved, as are a few developed countries--especially Australia. However, the bulk of the effort is taking place in Asia, particularly in Southeast Asia. These policies represent a threat to the maintenance or further expansion of U.S. sales of several important farm commodities to Japan.

Table 2.--Japanese imports of selected agricultural commodities and U.S. share, 1965-68

Commodity	1965			1966		
	Total	United States		Total	United States	
		Amount	As percentage of total		Amount	As percentage of total
	1,000 dol.	1,000 dol.	Pct.	1,000 dol.	1,000 dol.	Pct.
Beef and veal, fresh and frozen	6,916	14	0	10,558	37	0
Mutton and lamb, fresh and frozen	22,010	1	0	38,960	--	0
Poultry meat, fresh and frozen	4,602	3,606	78	6,044	4,509	75
Nonfat dry milk	13,605	11,644	86	20,819	7,603	37
Wheat	251,000	132,000	53	279,000	150,000	54
Rice	144,700	43,460	30	131,290	25,052	19
Barley	40,954	17,157	42	30,724	18,360	60
Corn	231,458	156,628	68	243,284	153,140	63
Grain sorghum	83,763	75,149	90	130,998	116,699	89
Lemons	6,800	6,799	100	8,658	8,658	100
Almonds	2,756	2,535	92	4,222	3,592	85
Pineapples, fresh	2,236	836	37	3,529	390	11
Raisins	5,875	5,351	91	6,729	5,480	81
Pulses	28,929	3,598	12	25,181	2,355	9
Sugar	145,535	--	0	120,552	--	0
Wheat bran	26,081	3,203	12	26,115	6,292	24
Oilseed cake	12,612	6,800	54	12,764	4,231	33
Alfalfa meal	13,248	13,157	99	18,180	13,073	99
Lard	10,631	8,246	78	10,886	8,007	74
Tobacco	44,643	26,155	59	61,520	46,291	75
Hides and skins	58,611	34,161	58	98,440	55,500	6
Soybeans	255,756	179,654	70	271,985	222,331	82
Wool	331,348	--	0	402,898	--	0
Cotton, raw	433,003	132,998	31	413,818	110,249	27
Tallow, beef	41,664	37,323	90	45,676	40,340	88
Total, selected items	2,218,736	900,745	41	2,422,830	1,007,189	42
Total import of foods, beverages, and agricultural raw materials	2,835,100	973,497	34	3,227,000	1,080,996	33

-- = none or negligible

Table 2.--Japanese imports of selected agricultural commodities

Commodity	1967			1968		
	Total	United States		Total	United States	
		Amount	As percentage of total		Amount	As percentage of total
	1,000 dol.	1,000 dol.	Pct.	1,000 dol.	1,000 dol.	Pct.
Beef and veal, fresh and frozen	13,576	36	0	13,311	177	1
Mutton and lamb, fresh and frozen	40,626	--	0	41,141	--	0
Poultry meat, fresh and frozen	5,912	3,832	65	11,027	5,433	49
Nonfat dry milk	32,234	148	0	17,762	1,621	9
Wheat	308,000	159,000	52	289,000	144,000	50
Rice	82,232	15,831	19	44,790	414	1
Barley	39,922	9,402	24	38,341	752	2
Corn	270,961	110,246	41	307,656	153,544	50
Grain sorghum	160,022	138,833	87	135,787	110,321	81
Lemons	11,610	11,610	100	15,165	15,165	100
Almonds	5,736	5,294	92	6,372	6,114	37
Pineapples, fresh	3,314	233	7	3,338	201	6
Raisins	6,672	5,570	83	6,544	6,004	92
Pulses	27,758	3,293	12	20,763	2,187	14
Sugar	117,855	--	0	142,237	--	0
Wheat bran	15,734	1,101	7	15,008	2,738	18
Oilseed cake	7,284	1,149	16	12,701	5,154	41
Alfalfa meal	19,528	19,268	99	18,609	18,504	99
Lard	8,346	7,185	86	8,895	7,808	88
Tobacco	56,877	39,731	70	50,656	34,031	67
Hides and skins	74,734	45,433	61	74,062	47,682	64
Soybeans	272,016	223,580	82	274,120	227,742	83
Wool	353,478	--	0	348,195	--	0
Cotton, raw	432,318	134,340	31	502,201	124,153	25
Tallow, beef	35,235	30,838	88	34,740	29,894	86
Total, selected items	2,401,685	965,953	40	2,432,421	943,639	39
Total import of foods, beverages, agricultural raw materials	3,278,100	1,025,144	31	3,389,000	1,013,282	30

-- = none or negligible.

Table 3.--Japanese imports of selected agricultural products, averages 1955-64, annual 1965-68

Commodity and country	Average		Annual			
	1955-59	1960-64	1965	1966	1967	1968
	Million dollars					
Rice	92.7	27.4	144.7	131.3	82.2	44.8
Corn	36.2	137.8	231.5	243.3	271.0	307.7
Sorghum	1.8	25.8	84.1	132.0	161.3	136.4
Pulses	11.2	13.3	28.9	25.2	27.8	20.8
Cassava	--	--	0.2	0.2	0.5	0.6
Tobacco	8.7	28.9	44.6	61.5	56.9	50.7
Copra	10.0	15.6	19.0	19.4	20.2	27.2
Palm kernels	4.2	3.7	3.5	3.4	2.5	3.5
Cottonseed	6.2	10.9	17.1	23.6	19.7	21.3
Castor oilseed	3.6	4.7	5.1	7.6	8.4	7.5
Sesameseed	4.1	6.0	6.9	8.7	10.2	9.0
Kapokseed	1.9	3.2	4.5	4.8	2.5	2.4
Rubber	84.9	114.5	101.3	109.7	102.3	95.4
Cotton	385.9	439.7	437.4	420.3	440.8	508.8
Jute	7.8	15.4	20.4	18.6	20.7	17.4
Abaca	9.6	9.1	7.1	5.3	4.4	3.6
Total	668.8	856.0	1,156.3	1,214.9	1,177.3	1,257.1
Total agricultural	1,542.1	2,165.4	2,835.1	3,227.0	3,278.1	3,386.9
Total, all imports	3,323	6,123	8,169	9,523	11,663	12,987
	1,000 metric tons					
Rice	627	223	967	812	509	271
United States	53	21	290	156	99	2
Burma	137	28	46	30	--	15
Thailand	140	74	145	85	128	88
Corn	557	2,275	3,434	3,598	3,960	5,144
United States	252	867	2,302	2,234	1,584	2,542
Burma	7	1	1	3	--	--
Cambodia	25	29	26	29	20	15
Indonesia	2	--	4	65	120	10
Thailand	69	432	576	767	699	633
Sorghum	31	456	1,431	2,247	2,584	2,314
United States	25	425	1,284	2,005	2,242	1,887
Thailand	--	1	20	58	37	19
Pulses	94	114	206	179	221	152
United States	2	10	37	24	30	21
Burma	41	61	96	34	70	39
Thailand	--	61	98	19	70	17

Continued

Table 3.--Japanese imports of selected agricultural products, averages 1955-64, annual 1965-68--Continued

Commodity and country	Average		Annual			
	1955-59	1960-64	1965	1966	1967	1968
	1,000 metric tons					
Cassava	--	--	3	3	10	11
United States	--	--	--	--	--	--
Thailand	--	--	2	3	10	4
Indonesia	--	--	--	--	--	3
Tobacco	5	16	25	32	30	27
United States	4	9	12	22	18	16
India	1	1	1	1	3	3
Copra	48	90	94	108	112	126
United States	--	1	2	--	--	--
Indonesia	17	9	23	34	10	48
Philippines	2	18	41	48	74	54
Palm kernels	28	27	22	23	19	23
United States	--	--	--	--	--	--
Indonesia	19	17	10	12	13	17
Malaysia, West	7	10	7	8	4	6
Cottonseed	74	139	217	266	216	246
United States	--	--	1	--	--	--
Cambodia	--	4	4	3	--	2
Thailand	5	10	10	17	28	39
Castor beans	24	33	40	63	64	43
United States	--	--	--	--	--	--
Cambodia	--	2	1	1	--	--
Indonesia	--	--	1	1	3	2
Thailand	19	27	26	41	34	24
Sesameseed	19	29	33	38	40	39
United States	--	--	--	--	--	--
Cambodia	1	2	2	4	5	4
Indonesia	--	1	3	4	4	2
Thailand	2	3	2	3	2	3
Kapokseed	23	41	56	53	33	36
United States	--	--	--	--	--	--
Cambodia	1	5	8	2	5	5
Indonesia	13	15	14	21	18	18
Thailand	8	20	33	28	8	14

Continued

Table 3.--Japanese imports of selected agricultural products, averages 1955-64, annual 1965-68--Continued

Commodity and country	Average		Annual			
	1955-59	1960-64	1965	1966	1967	1968
	1,000 metric tons					
Rubber	134	203	222	242	258	273
United States	--	--	--	--	--	--
Cambodia	--	1	6	6	4	5
Indonesia	18	11	84	98	80	53
Malaysia, West	104	106	45	56	70	105
Sabah	3	7	3	2	3	3
Sarawak	1	11	4	5	8	7
Singapore	1	3	10	4	6	9
Thailand	3	55	58	60	73	77
Vietnam, South	--	3	7	6	8	6
Cotton	569	734	735	749	801	407
United States	215	312	250	228	271	124
Pakistan	53	33	21	25	23	17
India	40	40	35	25	37	15
Burma	5	4	4	--	--	--
Jute	37	70	94	84	113	116
United States	--	--	--	--	--	--
India	--	--	--	--	--	--
Pakistan	33	43	27	27	23	29
Thailand	3	27	65	55	86	81
Abaca	27	24	22	18	16	15
United States	--	--	--	--	--	--
Philippines	27	24	21	18	16	14

FOREIGN AID

Japan's foreign aid policy is closely tied to the nation's commercial olicies of maximizing exports of industrial products and diversifying sources f imports. Many aid programs are designed to promote overseas production of gricultural products for import by Japan. These programs contribute to di- ersification of sources of raw materials, show a responsiveness to the less- eveloped countries' (LDC's) desire that Japan buy more from them, provide hese countries with additional foreign exchange to purchase Japanese products, nd contribute to a generally more favorable economic and political climate or Japanese business activities. Japan's aid programs also place emphasis n helping LDC's attain self-sufficiency in food production. Leadership of verseas programs is provided by the Ministry of Foreign Affairs (MFA) and inistry of International Trade and Industry (MITI).

Japan's foreign aid program can be said to have started with reparation ayments to Asian countries following World War II. The technical cooperation spects of the program are usually considered to date from 1954, when Japan oined the Colombo Plan.

Japan offers economic assistance in a variety of forms--bilateral official oans and grants, contributions to multilateral organizations, technical as- sistance, private investment, and export credits. The country also continues to make war reparations. Bilateral official loans, which have expanded rapidly n recent years, have contributed to the development of basic industries. For example, they have financed the construction of a fertilizer plant in Pakistan. These loans have also helped to relieve balance of payments problems and arrest inflationary spirals in India and Indonesia. War reparations and other official grants have contributed in numerous ways to the economic devel- opment of LDC's in Asia. Japan's technical assistance programs are especially adapted to Asian conditions. The exchange of persons for technical training and teaching helps familiarize other Asians with Japanese agricultural machinery and other products. It has also drawn Japan somewhat closer, culturally and politically, to the nations of South and Southeast Asia. Private export credits and private investments are growing rapidly.

According to official statistics, Japan's foreign aid--government and pri- vate--approached $1.1 billion in 1968. This figure represented a 23-percent increase over the previous year's total and was over three times the amount of 5 years earlier. It represented 0.74 percent of gross national product (0.94 percent of national income). Mainly responsible for the large gain in 1968 were $569 million of exports on a deferred-payment basis, almost a 50-percent increase from the preceding year. Direct private investments totaled $122 million, compared with $84 million a year earlier. Direct Government aid decreased by nearly 9 percent to $357 million. In 1968, more than two-thirds of the aid went to countries of South and Southeast Asia. The Government has announced its intention to double foreign aid during the next 5 years.

Agriculture, fisheries, forestry, mining, and industry have all received considerable attention. Relatively more resources are now directed to agri- cultural development than to development of other sectors. Greater emphasis on agriculture stems from the importance being placed on this sector by the

countries of South and Southeast Asia and from Japan's need to diversify sources of agricultural imports.

The first Southeast Asian Development Conference was held in Tokyo in April 1966. At this meeting, Japan was instrumental in setting up the Conference on Agricultural Development in Southeast Asia, which met in Tokyo in December 1966. In 1967, Japan pledged $100 million to the Asian Development Bank for the Agricultural Development Fund on the understanding that it would be earmarked for Southeast Asia. In 1968, Japan announced that it would contribute another $100 million to the agricultural fund. In addition, under the International Grains Arrangement of the General Agreement on Tariffs and Trade, Japan will give over half of her contribution to the Southeast Asian countries in the form of farm supplies (fertilizer, chemicals, machinery, and tools).

Technical Cooperation Program

As stated earlier, Japan's technical cooperation activities were started in 1954, following its affiliation with the Colombo Plan. In 1955, Japan accepted a few technical trainees from Southeast Asia and sent some technical experts to foreign countries. The Overseas Technical Cooperation Agency (OTCA) has handled technical assistance programs since 1962, when it was created as an agency of MFA. At five international centers in Japan, OTCA receives foreign participants for all types of technical training under the Colombo Plan and other technical cooperation schemes. Technical cooperation schemes under OTCA wholly financed by the Japanese Government include Japanese Technical Cooperation Schemes (Colombo Plan and others), the Junior Expert Technical Cooperation Program (begun in 1963), and the Japanese Overseas Cooperation Volunteers Program (begun in 1965).

The main functions of OCTA are: receiving foreign technicians, assignment of Japanese experts and overseas cooperation volunteers, establishing overseas technical cooperation centers and medical facilities, conducting development surveys for LDC's, and providing equipment and materials. The agency maintain overseas offices in Thailand, India, and Cambodia, and has 17 training centers in operation in Asia. OTCA's budget, provided by the Japanese Government, increased from about $4.5 million in 1962 to $18.9 million in 1968.

From 1955 to June 30,1968, 10,104 foreign participants received technical training in Japan; of these, 8,493 were from Asian countries. Of the total number of participants, 2,349, or 23 percent, were agricultural trainees. Japan is now receiving over 1,000 technical trainees annually for all fields, with almost 80 percent of this number from Asia.

During the same period (1955-68), Japan sent 3,024 experts abroad--1,106 to Asian countries. Of the total sent to all countries, 659 were agricultural technicians. In June 1968, 267 Japanese agricultural experts were working in technical cooperation schemes in Southeast Asia. These experts are fully qualified technicians, and they are given orientation and language training before being sent overseas.

In mid-1967, OTCA established the Agricultural Development Cooperation heme and the Primary Products Development Cooperation Scheme. The agricul- ral Development Scheme consists of an initial survey, a long-term plan of eration, provision of Japanese agricultural specialists, and supply of neces- ry equipment for LDC's. The main purpose of this program is to help LDC's crease their agricultural output, and thus improve their economic position.

The Primary Products Scheme was established to promote production of portable agricultural products, such as corn, grain sorghum, and oilseeds. pan establishes operations in a country, sends specialists in agriculture, rketing, and other areas, and provides fertilizers and machinery for demon- ration purposes. Through Japanese trade and banking institutions, OTCA ar- nges loans for the developing country to purchase the necessary materials om Japan and arranges for importation of the commodities produced into Japan. rough this scheme, Japan aims to ensure a more stable supply of primary oducts by developing new and diversified sources.

Japan establishes technical cooperation centers overseas, providing a am of Japanese experts and the necessary equipment. The recipient country rnishes land, buildings, and staff. The centers carry out technical train- g, demonstration projects, or research. The first agricultural cooperation nter was established in 1960 in East Pakistan; another agricultural center located in India; and two are in Cambodia. In addition, a survey has been nducted for a rice production demonstration center in the Philippines.

The Overseas Cooperation Volunteers Program is comprised of young people o have average technical knowledge and skills and a desire to help the de- loping countries. By June 30, 1968, 313 young people were serving overseas; the 107 in agricultural activities, 92 were located in the Far East.

her Official Programs

Japan External Trade Organization (JETRO), a corporate entity established 1958, has primary responsibility for promotion of exports abroad, receiving licy guidance from MITI. Most of JETRO's budget is furnished by MITI. The lance consists of fees, service charges, and prefectural and industrial con- ibutions. JETRO has a worldwide network of about 48 offices, 16 trade cen- rs, and six machinery centers. It sponsors trade fairs and missions, con- cts market research, and operates an information service. A newer but also jor function of JETRO is to promote imports from the LDC's. Such promotion primarily accomplished by arranging and financing exhibits in Japan of oducts available in each country for export to Japan. Four such exhibits are heduled annually. There is much interest in them on the part of the Japanese d the LDC's because of Japan's need to import such a wide range and variety products and the LDC's desire to supply them. JETRO has a long waiting list prospective exhibitors.

Several other organizations have been organized or proposed by MFA or TI. Most involve both Government and private participation. MITI has spon- red a fund for the export of fertilizers to be used by demonstration farms et up by Japanese technicians in South and Southeast Asia. MITI has also

announced the intention of establishing an Asian Trade and Development Corpo ration to provide farm machinery and supplies to LDC's for modernizing agri- cultural production, using as funds some of the income from duties on primar products imported from Southeast Asia.

The Role of Private Enterprise

Japanese private enterprise is cooperating closely with MFA and MITI in overseas agricultural development activities. Some private enterprise activities are tied directly to official programs. Others are conducted in- dependently under the broad general policies of the Japanese Government on promoting agricultural production abroad. Most of the effort is concentrated Southeast Asia, with major emphasis being placed on the production of feed- stuffs, oilseeds, tropical fruits, and silk. However, considerable capital has been invested recently in projects to promote production of grain sorghu and beef cattle in Australia.

In 1969, the Export-Import Bank of Japan released results of a survey of private Japanese firms with capital investments in business operations abroad. It indicated that the objective of 77 percent of manufacturing firm is the export of industrial equipment and raw materials--in other words, the maintenance and development of overseas markets. Some 71 percent of the agr culture, forestry, fisheries, and mining sector firms are aiming at developi imports of needed materials into Japan.

Enterprises engaging in dissimilar lines of business are banding togeth to undertake agricultural development abroad. The International Agricultura Development Company, financed by 30 interested firms, was formed in 1968 to supply technical assistance and farm requisites on a commercial basis to the developing countries of Asia. The company, which will have full cooperation of Japanese Government agencies, has a provisional contract to produce rice Malaysia as a joint venture with the Japanese Government. It also has plans for a livestock-raising venture in Okinawa.

Eight companies associated with the Fuji Bank have organized a consulta group for jointly taking up agricultural development projects abroad. Known the Fuyo Group, these companies will also cooperate with governments and pri vate enterprises in LDC's in agricultural development, irrigation, and other projects and may establish joint ventures. The companies feel that grouping will reduce risks in agricultural projects requiring considerable time for d velopment. The development companies will work closely with the agricultura development section of OTCA to further Japan's economic aims in Southeast As

In 1969, MFA sponsored the establishment of the Asian Private Joint In- vestment Company. This company was formed to provide a means for channeling farm requisites and technical assistance to developing countries by private business interests. Twenty-four companies are cooperating in this effort, a projects are under way in four Southeast Asian countries. The companies' ba objectives are: (1) to increase production of farm products for import by Japan and (2) to expand overseas markets for Japan's agricultural equipment, fertilizers, chemicals, and other farm supplies. Products being promoted un

is program are soybeans, sesameseed, silk, corn, grain sorghum, and cassava
r feed.

ACTIVITIES BY COUNTRY

donesia

Indonesia, with a population of approximately 116 million, has an economy
sed largely on agriculture. Consequently, the country represents a very
rge potential market for Japanese industrial products. Also, it possesses
eat potential for expanding the production of certain agricultural commodities
at Japan must import in increasing volume. During the long period of economic
terioration under the regime of former President Sukarno, the potential for
panding trade between the two countries could not be exploited. Indonesia's
reign exchange position became critical and remains so. However, since the
ange in government following the 1965 coup, the country's economic and trade
licies have become more pragmatic.

In 1967, Japanese survey teams visited Java and Sumatra to look into the
ssibilities of expanding production of corn for export to Japan. There have
en several similar missions since that time. Specific projects have been
veloped by the Japanese Government, Japanese private trade interests, or
th. Some dozen projects are currently underway or in the process of being
veloped. These include corn production and export projects in Java and
matra, and a grain sorghum production and export scheme in Java. Other ag-
cultural projects include a center for inspecting seed and training workers
seed multiplication and distribution, an agricultural mechanization training
nter, a rinderpest control project, the rehabilitation of an agricultural
gh school, and the expansion and improvement of natural silk production.

At the Colombo plan corn production project in east Java, Japanese techni-
ans are concentrating on development of suitable varieties, disease control
asures, and problems of drying and fumigating corn for export. Private Japa-
se interests are installing equipment for corn drying, fumigating, and han-
ing at the port of Surabaja. Three separate crop areas, of some 500 acres
ch, have been planted to corn for the past 2 years. Yields are reported to
three to four times the average for the area. Some unexpected disease prob-
ms have been encountered, but technical experts working at the three loca-
ons express confidence that these will be overcome. One of the major prob-
ms in expanding corn production in east Java is that practically all potenti-
ly arable land is now fully utilized. Nevertheless, higher yields should
ke it possible for east Java to export a substantial amount of corn to Japan.

In south Sumatra, a Japanese private company, working with an Indonesian
ricultural cooperative, is developing a large agri-industrial complex in-
uding corn production, ports, and highways. The new enterprise expects to
on be farming some 10,000 acres itself and intends to contract with local
rmers to cultivate an additional 10,000 acres under its supervision. The
tire production, which is expected to expand to 100,000 tons annually at
mpletion of the initial phase of the project, is to be exported to Japan.
e enterprise will receive liberal tax treatment by the Government of Indo-

nesia, and the required machinery and equipment can be imported from Japan duty-free.

Two Japanese companies recently announced the initiation of a joint farm production operation on Sulawesi Island. Crops to be grown include corn, peanuts, castorbeans, sesame, and tea. The first phase of the operation calls for establishment of a 500-acre corn and peanut pilot farm. All produce will be exported to Japan. An eventual export of 100,000 tons of corn annually is visualized.

Another private Japanese firm is promoting the production of grain sorghum in the Krawang area of Java near Djakarta. The firm aims to cultivate a quarter million acres and export the grain to Japan. This project may eventually provide 100,000 to 200,000 tons annually for export to Japan.

In Indonesia, as in several other LDC's of Asia, Japan is assisting in the development of silk production for export. Japanese experts consider west Sumatra to be favorably situated for the production of raw silk, and a Japanese natural silk expert visited the area in early 1969 to encourage rehabilitation and expansion of the industry.

The Government of Japan has technicians assigned to several projects in west Java to assist in increasing the production of rice. In 1969, Japan had five experts in seed multiplication, seed distribution, and farm mechanization working with an Indonesian program (known as BIMAS) to boost rice yields. Also there were Japanese rice technicians at experimental farms at Maura, at Kamandi, and at a paddy demonstration farm near Bogor. Japan is assisting Indonesia's rice production program to help the country become self-sufficient in this important food commodity. It is not anticipated that Japan will import rice from Indonesia.

Thailand

Japan is very interested in promoting increased agricultural production in Thailand, and Japanese private enterprise is cooperating by purchasing Thai products. Over the past several years, numerous Thai agricultural technicians have been trained in Japan at Japanese expense. The Government of Thailand is putting increasing pressure on Japan to take more Thai farm products, to reduce Thailand's trade deficit with Japan.

Japan's efforts to encourage Thai agriculture may be said to date from 1961, when an importers cartel, the Thai Corn Importers Committee, was formed in Japan. In negotiations each year with the Thai Government this committee commits itself to purchase certain amounts of Thai corn. For the marketing year beginning September 1, 1969, Japan agreed to take at least 540,000 tons of Thai corn. The cartel operates with the backing of MITI, the Ministry of Agriculture and Forestry (MAF), and the feed-manufacturing industry.

Early in 1968, the Japanese Government offered further technical aid to develop and improve Thailand's agriculture and to promote the import of Thai farm products by Japan. OTCA sent agricultural technicians to Thailand to study the country's agriculture and to recommend and introduce modern farming

chniques. The survey team's report concluded that Japanese assistance ould be concentrated on improvement of production of corn, grain sorghum, lseeds, beans, cassava, tobacco, kenaf, and bananas and other fruits. Japase technicians are to help in improving quality as well as quantity of proction.

Since the above-mentioned mission, several additional teams of Japanese perts have visited Thailand to assist in developing specific programs. A ree-man team of soybean experts was in Thailand in 1969. A principal aim of eir mission was to initiate a research program for developing a soybean vaety suitable to growing conditions in Thailand and of a quality desired by panese importers. A mission of sericulture experts surveyed the silk proction and processing situation and developed recommendations for expanding oduction and improving quality. The team recommended establishment of a riculture research and training center in northeastern Thailand. Japanese exrts are working on a wide range of other agricultural endeavors in Thailand. 1969, these technicians included experts in sericulture, mulberry cultivaon, cooperatives, land management, bamboo management, rice physiology, rice tomology, soybean production, cassava processing, river-basin planning, rural ter supplies, and agricultural insecticides.

In late 1969, a private Japanese firm announced plans to establish a bana plantation of some 12,000 to 15,000 acres in south Thailand and to import e total production into Japan. For this purpose, a joint Japanese-Thai comny is being formed. It is predicted that within 5 years annual exports of nanas from this plantation to Japan will exceed 100,000 tons. Another prite Japanese company has indicated that it will grow and can vegetables and neapples in Thailand for export to Japan.

Recent investment by three of Japan's largest trading firms in the biggest evator operation in Thailand--the Bangkok Drying and Silo Company--doubled at company's capitalization and should expedite collection and export of corn. veral Japan-Thailand trade conferences were held in Tokyo and Bangkok in 68 and 1969 to promote further trade between the two countries.

Japan is interested in importing more cotton and cottonseed but has incated that no technical experts are available to assist Thailand in cotton oduction. Another item Japan has considered is tobacco. However, a recent panese survey indicated that Thai tobacco is not of a quality suited to Japase cigarette brands. Thus, prospects of materially increasing trade in this mmodity are limited for the immediate future, although the Thai have indited much interest in exporting leaf tobacco to Japan.

mbodia

In 1965, a Japanese consortium was established to initiate production of rn on a commercial basis in Cambodia; the Cambodia Economic Cooperation Comny (SOCODAC) is owned jointly by five Japanese trading firms (50 percent) d the Japanese Government (50 percent). Funds were supplied by the Governent's Overseas Economic Cooperation Fund. In May 1968, this company estabshed a joint agricultural venture in Cambodia called Societe Khmer des

Cultures Tropicales (SOCTROPIC). Ownership of this company is divided--51 percent for the Cambodian Government and 49 percent for the Japanese consorti

In November 1968, MAF announced plans to start construction of an agricultural experiment station in Cambodia. Six Japanese agricultural experts were dispatched to Cambodia, with about $370,000 worth of machinery and equipment.

In Cambodia, OTCA operates a training center in crop production (extensi and demonstration) and one in livestock raising. In 1969, Japan and Cambodia extended agreements for Japanese assistance at the training centers for 2 years. The agreements provide for Japanese technicians, machinery, and materials.

In 1969, SOCTROPIC announced plans to build a large cornseed farm within 5 years in the Prek Knot area of Cambodia, on part of 12,000 acres to be irri gated under the United Nations water power and irrigation development plan. private Japanese company accounced plans for joint ventures, with local Cambodian cooperatives, in corn growing and livestock raising. Also in 1969, OTC had a team of technicians in Cambodia to study technical problems involved in corn production and export. Within 10 years, Japan expects to be importing 200,000 to 300,000 tons of corn from Cambodia.

Laos

Laos is a rather isolated country, with an estimated population of arou 3 million, most of whom are subsistence farmers. Consequently, it offers onl a limited market for Japanese industrial products. Its potential for exporti agricultural products to Japan is also limited. Nevertheless, Japan has show considerable interest in contributing economic and technical assistance. Mos assistance has taken the form of aid to develop the country's infrastructure and contributions to help Laos meet its foreign exchange needs.

Japan's aid started in October 1958, upon the signing of an economic and technical coooeration agreement between the two countries. Two major projects, totaling approximately $2.8 million, were undertaken under this agreement. These involved the installation of electric generating equipment and a water filtration and distribution system in Vientiane.

The major Japanese effort to assist in the agricultural development of Laos is the operation of an experimental farm near the village of Tha Ngone, some 25 kilometers north of Vientiane. The Japanese have been working with the Lao at this location since 1966 to operate and improve an experimental fa of some 200 acres. Currently, only about half of the total area is being used. In 1969, 13 Japanese and 10 Lao agricultural experts were working ther Major emphasis is on rice, and four crops are being harvested annually by usi a combination of early varieties of Japanese rice and IRRI varieties. Additionally, experimental work is going forward on corn, pineapples, sweetpotatoes, bananas, poultry, swine, and cattle.

Adajacent to the experimental farm, the Japanese are developing from jun- some 2,000 acres of irrigated land on which Lao farmers will be settled. panese experts will help guide these settlers' farm operations.

Early in 1969, several Japanese sericultural experts went to Laos to es- blish a sericulture center near Vientiane. This project is aimed at produc- silk for import by Japan.

Besides silk, only corn appears to be a possible item for export to Japan. e present high cost of moving corn to shipside at Bangkok must be overcome if is potential is to be exploited.

uth Vietnam

The Japanese have expressed a keen interest in making a major contribution the agricultural development of South Vietnam. A start has already been de, and there are plans for rapid expansion once the war there is terminated. uth Vietnam, with a population of some 18 million, is an attractive market, th immediate and long-term, for a wide range of Japanese industrial products. is a potential source for several tropical and other farm commodities that pan must import.

Several ventures were launched in South Vietnam during 1969. One is a pro- am to help improve ricegrowing and other farming in the Mekong Delta. This nture involves about 25 companies, which have set up in Tokyo a joint firm lled International Agricultural Development Company. Another group of 30 mpanies is planning agricultural redevelopment in the Danhim Dam area. This oup is called the Agricultural Development Council. Private Japanese enter- ise has indicated that it will build an agricultural tool factory and an perimental farm and agricultural technicians training school in South Vietnam.

ilippines

This relatively nearby tropical country of some 37 million persons is im- rtant as an export outlet for Japan's industrial products. Also, Japan has d a long and continuing interest in the import of agricultural commodities om the Islands. Even prior to World War II, Japanese capital, trading firms, d technicians were important in the abaca industry, at that time one of the st important in the Philippines.

The Japanese have helped establish and staff a training center for those rsuing small-scale industries in the Philippines. A model farm is being veloped which will place major emphasis on improved rice cultivation methods d help introduce improved riceseed to farmers. As of mid-1968, OTCA had four ricultural specialists stationed in the country. For several years, Philip- ne agricultural technicians have participated in 1-year courses conducted by CA in Japan. Four fields of study have been emphasized--rice cultivation, rm mechanization, irrigation, and horticulture.

Among new agriculturally related industrial enterprises in which Japanese firms are involved financially and technically are a $32 million sugar refinery and a $43 million fertilizer plant. Japan is also helping to build new food-processing facilities. The Japanese have a major interest in the expansion of imports of bananas and other tropical fruits and fruit products from the Philippines.

India

Japan's agricultural assistance to India has been centered largely on projects to increase rice yields. Technical aid activities began in 1953 with a compaign to popularize Japanese techniques of paddy cultivation. In 1959, at India's request, four Japanese farmers demonstrated intensive cropping of rice and wheat on a farm in Uttar Pradesh. As a result, the Government of India asked Japan to help establish demonstration farms in four major rice states, and in 1962, these firms were established in West Bengal, Orissa, Bihar, and Gujarat. In December 1964, an agreement was signed to establish four additional demonstration farms in Andhra Pradesh, Mysore, Kerala, and Maharashtra. Technicians at these farms demonstrate to farmers the techniques of ricegrowing and farm management and the operation of agricultural machinery. All eight farms have now been turned over to the Government of India.

In addition to the demonstration farms, Japan has established four agricultural extension centers in India which are supplied with Japanese machinery and materials and staffed with Japanese instructors.

Japan is extending credit aid to India for the importation of Japanese agricultural machinery, fertilizers, agricultural chemicals, and industrial machinery and goods. It was recently announced that Japan will help build a new fertilizer factory in India.

Under a proposed scheme, Japan will assist in the production (including financing) and transport of bananas from the vicinity of Madras to Japan. Also, Japan is considering very substantial increases in purchases of tropical fruit juices from India and will provide machinery and technical assistance for processing.

In addition to buying more fruit from India, Japan may buy more Indian tobacco and cotton. Also, Japan would take oilseeds, if they were available.

Other South and Southeast Asia

In Malaysia, machinery has been supplied for a project on the Prai River that is designed to boost rice production. The Japanese Government and private Japanese companies have been involved in this project.

For several years, an economic and technical cooperation agreement with Burma has existed. This arrangement has supplied Burma with farm mechanization, irrigation, and other equipment to improve and expand agricultural production.

pan is interested in increasing imports of pulses from Burma.

Japanese technicians are helping to build farm equipment plants in Pakian. An agricultural training center, where emphasis is being placed on farm echanization, has been established in East Pakistan. In addition, farm mechization studies are being carried out. Japan may buy more Pakistani cotton.

Japan's efforts in Nepal are limited. Currently, one Japanese agricural expert works with the Nepalese at an agricultural experiment station in he Terai region bordering India. He is working on rice and various other rops. A private Japanese firm is working under contract on an FAO-sponsored gricultural development project in the Terai.

Japan has helped establish an agricultural demonstration farm in Ceylon. ajor assistance has been given to the development of farm cooperatives. Reently, an agricultural research team composed of experts on general agriculire and rice cultivation spent some time there to determine how Japan could e most helpful.

In Afghanistan, the Japanese are operating a training center for those enaging in small-scale industries.

Japan's aid to agriculture is now extended to the remote Himalayan kingdom f Bhutan. There, Japanese scientists have established an agricultural experient station and an agricultural school.

ther Areas

Australia, with its abundance of land and its technical capabilities for reatly expanding agricultural production, is of keen interest to Japanese imorters. Japanese capital, in at least one instance in conjunction with Amerian capital, has in recent years been invested in large-scale development proects to expand production of grain sorghums for export to Japan. Japanese rivate interests have also invested in grazing land and other projects aimed t boosting Australia's production of beef for export.

In Iran, the Japanese are assisting in a land development project, one aim f which is to boost cotton production for export to Japan. They are also inolved in a project designed to improve grazing on some 800,000 acres. In adition, the Japanese have helped establish and staff a technical training school or those in small-scale industries.

Japan's close neighbors, Taiwan and Korea, are areas of special investment nterest, but emphasis there is on nonagricultural projects.

Latin America, with its potential for expanding production of virtually ny farm commodity and a rapidly growing market for industrial goods, is an rea of much interest to the Japanese. For some years, the Japanese have been nvolved in several significant agricultural development projects in the region. high percentage of private Japanese capital investment overseas has gone to atin America. More than a decade ago, the Japanese Government extended

technical and financial assistance to the large-scale settlement of Japanese farmers in Brazil and Bolivia. Private Japanese interests are currently developing large livestock-raising enterprises in Brazil and Paraguay.

In late 1969, a Japanese team was in Mexico to survey corn and grain sor ghum production and export capabilities. An arrangement whereby Mexican cooperatives will sell these commodities to Japan's major farm supply cooperati is reported to be under consideration.

A Japanese trade and investment mission visited the Dominican Republic i 1969. Japan is making a major effort to expand its share of the market there for such farm-related industrial products as light agricultural machinery and portable irrigation pumps. The mission also investigated the possibilities o providing technical and financial assistance to agricultural experiment stations and sugar refineries as well as to some industries not related to agric ture.

The Japanese are also interested in expanding agricultural imports from Africa, as well as selling more Japanese industrial products there. However, the continent's relatively sparse population and the subsistence level at whi a high percentage of the people live make the potential market for Japanese g smaller there than in the other less developed regions of the world. Several African countries have recently strongly urged Japan to take more of their fa products so their trade deficits with Japan can be reduced. Japan's limited agricultural assistance to date has been largely concentrated in East Africa, with major emphasis placed on feed grains. A major trading firm has announce plans for a large farm production development in the Sudan. The Japanese hav been involved in smaller projects of a similar nature in Tanzania and Kenya. In late 1969, a Japanese survey mission visited Kenya, Uganda, Tanzania, and Zambia to look into the possibilities of increasing agricultural imports from these countries. Corn is a commodity that the Japanese would especially like to import in greater volume from East Africa.

OUTLOOK

As incomes rise rapidly, Japanese consumers are demanding a more abundan supply of foods and placing greater emphasis on variety and nutrition. The Government implements its policy of improving the quality of the national die in many ways. Per capita consumption of starchy foods is decreasing, while that of meat, dairy products, and fruits and vegetables is rising. The calor contribution by starchy foods to the Japanese diet decreased from 74 percent 1955 to 60 percent in 1966. At the same time, the contribution of animal pro tein foods rose from 6 percent to 11 percent and that of fruits and vegetable from 4 percent to 6 percent.

In 1966, MAF predicted that total consumption of meat, milk and other dairy products, and fruits would more than double within 10 years. It also predicted that consumption of soybeans, green vegetables, sugar, fats and oil and silk would increase by more than half. Consumption of wheat and eggs wou increase substantially, and that of rice would remain about the same.

Japan has become practically self-sufficient in the production of rice, st vegetables, and eggs, but most of the increased demand for food and other ricultural products will have to be met indirectly (for example, feedstuffs r production of livestock and poultry products) or directly by imports. nsequently, for the indefinite future, Japan will need to import increasing antities of feed grains and other feedstuffs, wheat, oilseeds, pulses, meats, pical fruits, raw silk, and numerous other farm products.

Whether the United States can share fully in the expected continued ex- nsion of farm product imports will depend partly on Japan's success in as- sting expansion of farm production in LDC's, particularly in Southeast Asia. fact, the degree of any such success will partly determine whether the ited States even maintains its current position in the Japanese market. me success has already been achieved. However, it is too soon to expect ch in the way of increased production, as most projects have only recently en started. Many others are in the survey stage or still under discussion. doubtedly, additional projects will be forthcoming in the years ahead. erall, a steady but moderate expansion in the supply of farm products avail- le for export to Japan can almost surely be expected from these efforts. mpetition with U.S. farm products will gradually increase, but the major mpetitive impact of these efforts is a decade or more in the future. At is point, estimates of the specific volumes to become available are highly ntative at best.

ed Grains and Other Feedstuffs

Numerous locations in Southeast Asia are well suited for the production various feedstuffs. In only a decade, Thailand expanded production of corn the point where total exports, which were negligible until the mid-1950's ceeded a million tons in 1964. Exports have since expanded even further. nsiderable success in the near future can probably be anticipated from pro- cts to produce corn for export in Cambodia and Indonesia. Additional projects r corn growing are likely to be developed for other Southeast Asian coun- ies. By no means will all of the anticipated increase in production be ex- rted to Japan. More will be consumed domestically by the relatively small t expanding poultry and livestock industries. Some will be exported to arby markets--such as Singapore, Hong Kong, and Taiwan--and some may be ex- rted beyond the region. However, it appears reasonable to expect that by 75, exports of corn from Southeast Asia to Japan may be in the range of 1.5 llion to 2.0 million tons annually, compared with 0.7 million tons in 1968.

Attempts to expand production of grain sorghum are likely to meet with me success in Indonesia, Thailand, perhaps Burma, Australia, and elsewhere. 1975, exports to Japan from Southeast Asia could be in the range of 200,000 300,000 tons annually. A roughly equivalent amount may be moving from stralia to Japan. In 1968, sorghum imports from Southeast Asia and Australia taled less than 100,000 tons.

Dried cassava for use in mixed feeds is a relatively new item of import Japan, but one in which there now appears to be much interest, although 967's imports totaled slightly less than 10,000 tons. Cassva is grown very

widely for food in the tropics, and much of the land in Southeast Asia is sui for its production. There is, therefore, a tremendous potential for expandin production for export, and this commodity represents a competitive threat to U.S. feedstuffs in the Japanese market. The biggest gain in cassava producti and trade has been registered by Thailand. Exports of dried cassava products from that country expanded from 54,000 tons in 1955 to 782,000 tons in 1967. Most exports now go to Western Europe for use in mixed feeds.

Oilseeds

To help meet the rapidly growing requirements for vegetable oils and oil meals, the Japanese foreign assistance programs are placing considerable emphasis on increasing production in Southeast Asia, particularly in Thailand. There and elsewhere, Japanese agricultural technicians are working to develo soybean varieties that under Southeast Asian conditions will produce high yields and a type of bean desired by Japanese processors. Other oilseeds, su as sesame, safflower, and peanuts, are also being pushed. Some increase in e port availabilities can probably be expected. However, up to the mid-1970's, it seems unlikely that oilseeds production in Southeast Asia will expand to t point where it will have a significant impact on the import market in Japan.

Tropical Fruits

Southeast Asia is particularly well situated for producing tropical fruit to meet the rapidly growing demand in Japan, where imports of bananas alone expanded from 24,000 tons in 1955 to 638,000 tons in 1968. The recently announced banana-growing projects in Thailand and those proposed for southern I and the Philippines should have little difficulty in marketing all their produce in Japan. Systems for coordinating tropical fruit production and market for processing or export, are being improved in the Philippines, Malaysia, Thailand, Pakistan, and India. These countries will thus soon be in a better position to serve Japan's import needs.

Silk

After long being a major exporter Japan is rapidly increasing its import demand for raw silk, owing to increased demand and lower production. Consider able success has been achieved in South Korea in expanding and improving the production of raw silk for export, part of which goes to Japan. Japan is sponsoring silk production expansion and improvement projects in Thailand, Laos, Cambodia, and Indonesia. Initiation of silk projects in other countries of South and Southeast Asia is anticipated. Silk culture is well suited to small Asian farms where adequate family labor is available. Silk does not compete directly with any U.S. farm product.

bacco

India is the principal Asian country supplying tobacco to Japan. This ade seems likely to expand, as some Indian tobaccos are well suited to the quirements of the Japanese cigarette industry. Thailand is also anxious to l tobacco to Japan. Japanese experts have looked into the possibility of porting significant quantities of Thai leaf but report that the Japanese garette industry cannot use very large quantities of the kind of tobacco ailable from Thailand.

tton

Japan imports significant quantities of cotton from Pakistan and India d until very recent years took a small quantity from Burma. Production of a pe cotton desired by Japan is increasing in Pakistan and Australia, and cot- n exports from these countries can be expected to be a growing threat to the S. position in the Japanese market. Japan has indicated a desire to import re cotton and cottonseed from Thailand if production can be sufficiently ex- nded.

vestock Products

Japan will meet most of its rapidly growing requirements for livestock oducts from domestic production based on imported feedstuffs. Nevertheless, me increase should occur in imports of poultry, red meats, tallow, cattle des, and perhaps certain other livestock products. It is unlikely that the untries of South and Southeast Asia will export a significant quantity of vestock products to Japan. However, Australia and New Zealand will be im- rtant sources of meat imports.

In addition, a Japanese private business has recently announced a new nture to produce pork on Cheju Island, Korea. Reportedly, a U.S. firm is oviding part of the financing and technical assistance. Plans call for a arge hog-raising operation, slaughterhouse, refrigeration plant, and other cilities. The Japanese firm will ship frozen pork to Japan for sale as pork ts, ham, and sausage.

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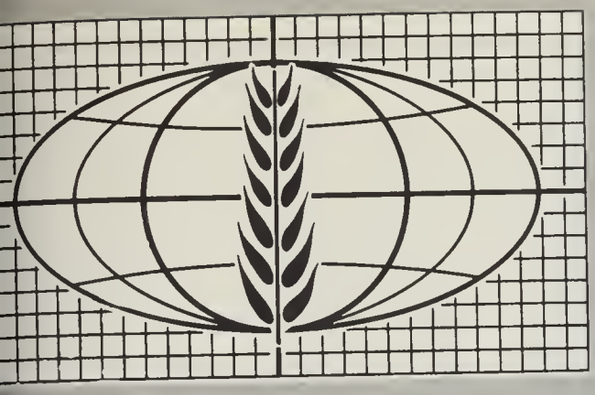

Turkey's Agricultural Economy in Brief

By Michael E. Kurtzig

EIGN 298 FOREIGN REGIONAL ANALYSIS DIVISION APRIL 1970

ABSTRACT: This report describes recent trends in Turkish agriculture, trade, and economic planning. Cotton, tobacco, and filberts remain leading exports, while wheat needs--the prime food stable--are satisfied by domestic production and imports. The United States receives most of the Turkish tobacco exports while supplying most of Turkey's import requirements for wheat, fats and oils, and feed grains. The continuing modernization of farming technology, greater use of fertilizers, and the introduction of higher-yielding plant varieties have improved the agricultural picture. Though agriculture remains dominant in the Turkish economy, government efforts to step up industrial development through 5-year planning programs continues. The GNP growth target of 7 percent is being achieved.
KEY WORDS: Turkey, agricultural production, trade, wheat, cotton, tobacco, agricultural statistics.

SUMMARY

Turkish agriculture contributed $2.3 llion to the country's economy in 1968, counted for 90 percent of its total exrts, and involved two-thirds of the popution. In the last few years, Turkey has de much progress in its agricultural delopment; agricultural exports have steady increased, amounting to $433 million in 68. The major farm exports are cotton, bacco, and filberts. Agricultural imports ve declined. In 1968, for example, they re valued at $28 million, about one-half e 1964 value. In 1967, a record-high heat harvest called for a cutback in grain ports and, consequently, a decrease in tal agricultural imports. Although no heat imports were required in 1967 and 968, lower crop yields in 1968 and 1969 nessitated the importation of over one-half llion metric tons of wheat yearly.

Since the total land available for cultivation has about reached its limit, production will be increased chiefly by improving yields. Towards that goal, Turkey is implementing plans for more extensive use of modern technology. The introduction of new high-yielding wheat varieties has improved the breadgrain outlook. Cotton production continues to increase as greater productivity is achieved. Tobacco production in the 1960's has risen with an expansion of area, but with a decline in yield. Both cotton and tobacco, Turkey's first and second agricultural export items, have found some difficulty competing on the world market.

THE PEOPLE

Turkey's population increased from 18.8 million in 1945 to 34.4 million in 1969. It is increasing by about 2.6 percent, or an

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tional 1 million persons annually. Pop-
tion density is 114 persons per square
e and about 160 persons per square mile
cultivated land. Twice as many people
e west of a line joining the cities of
na and Samsun, roughly the east-west cen-
of the country, as east of it. Yet the
th rate is the same for both areas. Tur-
's population is 98 percent Moslem, with
remainder Christian (Greeks and Armeni-
) and Jewish. There are 2 million Kurds,
stituting an ethnic and linguistic, but
religious, minority. Racially, the Tur-
n people are an intermixture of Mediter-
ean and Armenoid peoples. The Turkish
guage, which is of central Asian origin,
written in Arabic script until the rise
Ataturk, who Romanized it in 1928.

THE LAND

sical Characteristics

Turkey has an area of 296,500 square
es, about the size of Texas and Louisiana
bined. It is contiguous to six nations--
ece, Bulgaria, the USSR, Iran, Iraq, and
ia--and is bounded by three seas--the
iterranean, the Aegean, and the Black.
country lies principally in Asia, east
the Bosphorous; less than 4 percent lies
the European side.

The Anatolia Plateau, which occupies a
ge part of the country, is the main grow-
area for Turkey's wheat. It is surround-
by mountains that block off much needed
sture, and is subject to frequent
ughts. The coastal strips, both of the
iterranean and the Black Sea, are the
t fertile agricultural areas of Turkey.
country has great differences in soil
climate, allowing for the production of
ide variety of agricultural products. The
tern half of the country is extremely
ntainous but provides extensive grazing
livestock.

mate

Turkey's climate, which is character-
d as "continental," is comparable to that
the United States. It ranges from dry to
id, from subarctic to subtropical. Rain-
l is the main factor limiting Turkish
in production. Droughts are common. The
erior of the country receives a mean annual rainfall of only 11 inches. The coastal areas along the Mediterranean and Aegean average over 20 inches of rain, while areas in the Black Sea region receive up to 100 inches annually.

Land Use

About 70 percent of the country is considered agricultural land. Almost one-third of the total area is used for crops that account for the bulk of Turkish farm production; this proportion (33 1/3 percent) compares with almost 20 percent in 1948. The land has been heavily exploited over the centuries and today, despite conservation efforts, continues to be overgrazed and damaged from much erosion. Table 1 shows the gains in crop and fallow area at the expense of pastures.

The major increase of agricultural land was realized in the early 1950's by plowing up pastureland, which decreased from 49 percent of the total area in 1948 to 42 percent or less in 1955. During this time, 15 to 17 million acres were brought under cultivation, including fallow. Most of this change took place on the central plateau where the new cropland was devoted mainly to wheat. Since 1960, there has been relative stability in the size of the cultivated area and in the division of Turkey's farmland into grain fields, vineyards, orchards, other crop fields, and pastures.

PATTERNS OF AGRICULTURE

There are about 3 million separate agricultural holdings in Turkey of which two-thirds are less than 12 acres in size, accounting for only one-quarter of the total land in farms. A considerable number are subsistence farms. About 12 percent of the farmers farm more than half of the land, in moderate to large size units of 25 acres or more. There are some very large farms of over 1,200 acres--588 according to the 1963 agricultural census--of which 97 are state farms. These larger farms are located in the southern parts of the country, in the Mediterranean and Aegean regions, and are the most productive in the country. These farms usually grow cash crops such as tobacco, cotton, and citrus.

Table 1.--Turkey: Land use, 1948, 1955, 1960, and 1965

Land use	1948	1955	1960	1965
	Million acres			
Cultivated area in crops 1/	27.1	39.6	42.9	43.5
Fallow	10.9	16.8	19.7	21.1
Meadows and pastures	94.7	76.6	70.8	69.8
Forests	25.9	25.7	26.2	26.2
Nonagricultural land	33.3	33.3	32.4	32.4
Total 2/	192.0	192.0	192.0	193.0

1/ Includes vineyards, orchards, olive gardens.
2/ The total area was entered as 191.9 million acres until 1963, when it was increased without explanation to 192.9 million acres. The land unaccounted for is entered as "wasteland, lakes, and marshes," without mention of cities, roads, railroads, rivers, or parks.

Small farms, usually consist of cropland only, with no grazing area. Livestock are grazed on common grazing grounds or on land where villages have grazing rights.

Turkish agriculture suffers from considerable land fragmentation caused by the traditional splitting of land among the males of the family. Less than one-tenth of the farms are in one piece. The 1963 census indicates that many of the smaller farms are split into many pieces with poor field layout.

Most Turkish farmers use age-old traditional methods of farming involving much hand labor. Some new methods and modern technology have been adopted by farmers in the more intensively cultivated areas.

PRODUCTION

Agricultural production is dominated by cereals, primarily wheat. On a value basis, nearly one-third of all agricultural production is accounted for by cereals, about two-thirds of which is wheat. One-fifth of total agricultural production is in industrial crops, mainly cotton, tobacco, and sugarbeets. Livestock products account for a little more than one-quarter of the total. Other agricultural products of considerable importance include raisins, nuts, and citrus (table 2).

Cereals.--Wheat is the primary grain and number one food in the country. Although it is grown throughout the country more than two-thirds of the crop is produced on the Anatolian Plateau, accountin for more than 6 million tons in 1968. Whe area increased substantially between 1948 and 1955, leveling off at around 20 milli acres. Production fluctuates according t the rains, and yields have remained relatively low--the average for the country i about 15 bushels per acre. In 1967, a record 9 million tons were produced.

Mexican wheat.--The most vigorous innovation of recent years in the grain fields in Turkey has been the introductio of semidwarf high-yielding wheats, known as Mexican wheat. These new varieties, which started a revolution in wheat field are enjoying increasing influence and favo among the Turks.

The Mexican wheat program was initia ed in 1965 when a farmer in Tarsus plante 66 pounds of Sonora 64 wheat. The result were so good that 102 farmers from the Cukurova area planted 60 tons of imported Sonora 64 in 1966. Thus, the program beg with early experimentation undertaken by private Turkish farmers. With these favo able results in mind, the Turkish govern ment asked the U.S. Agency for Internatio Development (USAID) Mission to assist in spreading the use of the new varieties. T

Table 2.--Turkey: Production of principal commodities 1948, 1957-59 average, annual 1963, 1967, and 1968

Commodity	1948	Average 1957-59	1963	1967	1968
	1,000 metric tons				
t	3,946	6,486	7,892	9,000	8,400
ey	1,959	2,800	3,900	3,800	3,500	
	394	718	900	825	780
	701	883	990	1,080	1,000
	305	478	500	475	450
, paddy	90	164	182	200	184
r grains	331	558	532	414	392
es	276	289	279	288	293
toes	454	1,391	1,600	1,760	1,805
rbeets	726	2,651	3,280	5,253	4,716
cco	83	121	132	183	162
on	67	170	257	396	435
onseed	142	304	418	634	700
lowerseed	81	106	87	230	230
us	60	234	398	541	662
es	77	192	327	640	700
s	57	103	152	165	180
hes	6	71	63	103	99
, fresh	119	149	208	232	215
es 1/	1,468	2,452	2,453	3,128	2,900
erts, in shell	50	88	91	70	130
ins	70	73	60	93	103
es	211	370	410	400	775
	2,270	3,664	4,059	4,426	4,451
s	44	54	67	77	82
	150	361	441	455	469
, greasy basis	19	43	43	46	47
Production index					
Total agriculture	57	100	117	135	136

/ Excludes 4 times the raisin figure.

n devised to accomplish this called for mitting selected growers to have seed, vided they agreed to use a specified kage of cultural practices under super- ion and inspection of the government and officials. About 22,000 tons of seed of ected varieties were imported in 1967, nearly all was distributed and planted t fall on 425,000 acres. These yielded -half million tons of wheat when harvest- in May-June 1968. In 1969, approximately million acres were harvested, yielding ut 2.1 million tons. The average yield the new varieties in the Cukurova area has been around 50 bushels per acre, compared with native wheat yields in these areas of 15-22 bushels per acre.

Since the benefits of Mexican wheats are manifested only under conditions of high fertility and favorable moisture, future expansion will be at a less spectacular rate. It can also be expected that yields will decrease as the program expands and comes under decreased supervision.

While wheat development is primary, improvement of barley, rice, corn, and

sorghum is also underway. The yield of these may also be increased by adapted research with high-yielding varieties as well as improved production practices.

Cotton.--Cotton production increased from 65,000 tons in 1948 to 435,000 tons in 1968. Between 1948 and 1952, cotton acreage more than doubled to over 1,600,000 acres. Since then, acreage has remained relatively stable, fluctuating between 1,500,000 and 1,800,000 acres. No significant increase in acreage is expected. Any increase in production will therefore be a product of improved yields. In 1948, an acre yielded about 160 pounds of cotton lint. In 1968, 550 pounds per acre were harvested. This dramatic increase has taken place mainly since 1957 and can be attributed largely to two factors: the introduction of new high-yielding upland cotton from Syria and the United States, and increased irrigation and use of fertilizer.

Tobacco.--Tobacco production has also increased, from around 83,000 tons in 1948 to approximately 162,000 tons in 1968. While the increase has been fairly steady, there have been poor crops. During the early 1960's, output fluctuated from a low of 90,000 tons in 1962, when there was a severe infestation of Blue Mold disease, to a record 194,000 tons in 1964. The increase in production that has taken place has been due to expanding area, from 291,000 acres in 1948 to slightly over 700,000 acres in 1968. Yield for these two years declined from 668 to 535 pounds per acre.

Other Crops

Sugarbeets became a major industrial crop in the 1950's. Average area in sugarbeets during 1960-64 was three times that of a decade earlier. And despite increased sugar consumption, Turkey had substantial export surpluses of sugar in the 1960's.

Dry beans, chickpeas, and lentils are the main dry legumes produced for food. Also produced are broadbeans, kidney beans, and peas. A great variety of vegetables are produced for local consumption.

Olive oil is the major oil consumed and forms a large part of the country's vegetable oil production. Other major oils produced are cottonseed, sunflowerseed, sesame, peanut, and linseed.

A variety of fruits are produced. Most important are grapes, which are grow in most parts of the country. More than one-third of the crop is dried for raisin another third is used for pekmez (boiled-down grape juice used for sweetening), an 23 percent is consumed fresh. Only 3.1 percent of the grape crop was used for wine in 1967.

Turkey is the world's largest commercial producer of dried figs, which are a high earner of foreign exchange.

Most of Turkey's citrus is grown in the Mediterranean coastal region under irrigation. This industry is now expanding and plans call for continued expansion as European markets are enlarged. Produced are Jaffa and Washington oranges, seedless tangerines, and lemons.

Deciduous fruits grown are apples, pears, peaches, cherries, quinces, plums, mulberries, and apricots. All but the apricots are domestically consumed.

Turkey produces a variety of nuts--filberts, almonds, pistachios, and walnuts being the most important. Turkey is the world's largest producer of filberts and exports rank third in value of Turkey's agricultural exports.

Livestock

The raising and tending of animals is one of the most important agricultural activities in Turkey. Animals are used fo motive power and provide significant quantities of dairy products, meat, wool, mohair, and hides and skins. Animal dung is an important fuel in the rural areas. Although Turkey has large numbers of cattle, horses, and donkeys; goats and sheep far outnumber any other type of domestic anima

The potential for increasing output o livestock products in Turkey is considered good. However, there must be a vast and widespread improvement and modernization o animal husbandry techniques. Range management techniques and forage management are singled out for a special effort in the current five-year plan. The marketing and pricing systems for meat will have to be modernized in any major advance of Turkey' livestock industry.

Table 3.--Turkey: Consumption of fertilizer

Plant nutrient	Average 1954-56	1959	1963	1966	1967
			Metric tons		
trogen (N)	8,139	21,800	50,099	95,865	138,140
osphate (P_2O_5)	9,558	4,400	58,464	90,720	132,190
tash (K_2O)	5,599	4,100	574	3,640	8,565
Total	23,296	30,300	109,137	190,225	278,895

Most of Turkey's livestock are handled the traditional village manner. Each day e animals of the village are communally rded to and on all available land located ar the village and not used for culti- ted crops. In the evening, the animals e driven back to the village compound. e great expansion of cultivated land in e early 1950's encroached upon former sturelands. Very little supplemental eeding of forage and virtually no feeding grain is practical for the great bulk of e livestock.

Meat production in Turkey is difficult estimate. Slaughter house figures are eliable, but the bulk of animal slaughter- ng is done outside of abattoirs and is not ecorded. This is especially true for sheep nd goats.

Most of the dairy output comes from mall herds which are kept near big cities supply the urban market. Small herds nd flocks are kept by villages to supply heir local needs. Much of the milk is pro- essed into butter, cheese, and yogurt. The ilk yield per cow is quite low (1,300 ounds in 1966)--compared, for instance, ith the U.S. yield of about 9,000 pounds a ear.

CONSUMPTION OF AGRICULTURAL PRODUCTS

Average caloric intake in Turkey rates avorably with other Middle East countries t about 2,680 calories per day. Turkey has ne of the highest per capita cereal con- umption rates in the world. About 186 ilograms per year supply about 1,800 calo- ies per day. 1/ Wheat and other grains provide almost 70 percent of the caloric value of the food supply. Turks also consume a large amount of dry legumes and fruits. Vegetable oil consumption is low by western standards. Consumption of sugar increased throughout the 1950's; Turkish annual per capita sugar consumption is now about 14 kilograms.

As the population shifts to urban areas and incomes rise, the Turks expect their general diet to improve. There should also be a decrease in cereal consumption and an increase in livestock product consumption.

AGRICULTURAL INPUTS

Fertilizer

Consumption of fertilizers has increased sharply since 1960 (table 3). However, the rate of application is still significantly below the average in most countries with similar climate. In 1966, for instance, chemical fertilizer use was 10.8 kilograms per hectare, only one-sixth the average for Organization for Economic Cooperation and Development (OECD) countries. Turkey's total fertilizer consumption in 1966 was 100 times greater than in 1947. Despite the increase use of chemical fertilizers, plant material and animal manure still remain most important.

Farm Machinery

Modern machinery is still beyond the means of most farmers, and they rely heavily on draft animals for farm power. However, there has been a steady increase in use of machinery (table 4).

1/ FAO-ERS.

Table 4.--Turkey: Farm machinery and equipment, 1948, 1955, 1960, 1965, and 1967

Machinery	1948	1955	1960	1965	1967
			Thousands		
Wood plows	1,625	2,124	1,991	2,031	2,064
Iron plows	684	1,026	1,159	1,380	1,446
Tractor plows	4	42	47	62	80
Tractors	27	40	42	55	75
Combines	3	6	6	7	8

Numbers of tractors and tractor-drawn equipment rose sharply between 1948 and 1956. Then a slowdown occurred, which only ended with the inception of the First Five-Year Plan in 1963.

Irrigation

Along with increased fertilizer use, irrigation will be one of the primary methods by which crop productivity will be improved. In 1967, only about 3.7 million acres--one-tenth of the cropped area--was irrigated. There are an estimated 12 million acres--some of poor quality--potentially irrigable. Development plans call for irrigation of only 6 million acres.

Turkey is proceeding with a dam-building program to supply electric power as well as to provide water for irrigation. The greatest need for irrigation is in the relatively dry interior. Irrigation has a high priority in government plans, particularly when it can be used in conjunction with improved varieties of seed and better farming practices.

The chief irrigated crops are industrial crops such as cotton, sugarbeets, and sunflower, which took more than 40 percent of the irrigated area in 1967. Citrus and vegetables, the new wheat varieties, and some corn and pulses take up the rest of the irrigated land.

Labor

Despite encouraging efforts towards industrialization, the dominance of agriculture will not change dramatically in the near future. According to 1965 figures, more than two-thirds of the labor force was engaged in agriculture, indicating that close to 10 million people are employed directly on the land. There is a sizeable movement of farm laborers from area to area, owing to seasonal work changes.

THE ECONOMY

Gross National Product and Agriculture

Turkey's gross national product in 1968 was $11.5 billion. During the First Five-Year Plan, from 1963 to 1967, it increased at an annual average rate of 6.7 percent--close to the planned 7 percent. Per capita annual average GNP was about $334, but per capita agricultural income was only about one-third of the national average.

In the early 1950's, agriculture's contribution to the GNP was about 50 percent. In recent years, it has declined to about 35 percent, while that of manufacturing increased from 11 percent in 1960 to 16 percent in 1966. Agriculture, however, still dominates the economy and provides employment for close to 70 percent of the working population.

Balance of trade.--Turkey suffers from an unfavorable balance of trade and an unfavorable balance of payments chiefly because of large imports of capital goods. From 1963 to 1967, the average trade deficit was close to $190 million; in 1968 it was around $275 million. The unfavorable balance of payments has been offset somewhat by foreign grants. Even this, however, has been insufficient to prevent deficits. As a result, the country's foreign exchange reserves have continued to decline, making the

oduction and planning of new programs icult.

TRADE

osition of Trade

Composition of Turkey's trade remained tively stable in the last decade. Ex- s, primarily cotton, tobacco, and fil- s increased at a rate of approximately percent during the First Five-Year Plan. osition of imports also remained rela- ly the same--with electric and nonelec- machinery and parts the largest items, esenting almost one-third of total im- s. Metal and metal products were second, nting to about 12 percent of total im- s. Imports have fluctuated according to needs of the Turkish industrial complex. 968, they reached $770 million.

orts

Between 1963 and 1968, agricultural ex- ts grew at a rate of about 6 percent per r. In 1968, owing to low tobacco, nut, olive oil exports, total exports dropped ercent.

Cotton is Turkey's leading agricultural ort and money earner. Production and ex- ts increased rapidly throughout the 0's and by 1965 cotton replaced tobacco the leading export. Turkey is the world's th largest exporter of cotton. Most of cotton is exported to the European Com- Market countries, the United Kingdom, other West European nations. Exports in 8 were four times as large as the 1955-59 rage, totaling 224,000 tons. Although ghtly less than 50 percent of the crop is orted, exports accounted for $136 million 1968.

Tobacco is the second major export. rkey is the world's leading producer and porter of "oriental" tobacco which is used blending and is in demand by countries at grow and use much tobacco themselves, ch as the United States.

Tobacco had been the leading export un- l 1965, when cotton became number one. In 68, tobacco exports were valued at $94.8 llion, or approximately 20 percent of tal exports, compared with $118 million in 67. Turkey entered a period of oversupply beginning in 1965, as a result of the huge 1964 crop. By the end of 1967, Turkey had on hand 147,000 tons of tobacco, just about a year's production.

Close to two-thirds of Turkish tobacco (by value) was exported to the United States in 1967, and about 56 percent in 1968 (table 5). Other markets are West Germany, which took a little less than 7 and 14 percent in 1967 and 1968 respectively. Other importing countries are Czechoslovakia, the USSR, East Germany, and Israel.

Filberts are the third major export item. Turkey is the world's largest producer of filberts. Exports of filberts averaged 113,000 tons in the years 1960-66, nearly all as kernels. Turkey also ranks first as a pistachio producer, but is second in export, following Iran. Exports average 1,650 tons (shelled) in 1962-66.

Imports

Turkey imports relatively little agricultural produce. In 1967, about $37 million worth was imported, accounting for 5 percent of total imports. The average for 1964-66 was $53 million, whereas in 1968 the total was $28 million.

Major items on the import list are wheat, hides and skins, wool and hair, coffee and cocoa, and fats and oils. Wheat imports are largely determined by the size of the Turkish wheat crop. Owing to a record crop in 1967, little imported wheat was required. Because of a smaller crop in 1968, more than one-half million tons were needed and were imported early in 1969. A still smaller crop was harvested in 1969, which indicated greater wheat imports than a year earlier. Imports of the other temperate agricultural products have generally trended downward because of increased domestic production and to conserve foreign exchange (table 6).

U.S.-Turkish Agricultural Trade

From the beginning of the 1960-69 decade, total U.S. exports to and imports from Turkey increased rather sharply. U.S. imports of agricultural products also increased. U.S. exports, on the other hand, declined sharply. Moreover, the U.S. share of the market declined, especially during

Table 5.--Turkey: Value of principal agricultural exports by leading destination, average 1960-62, and annual 1966, 1967, and 1968

Commodity and destination	Average 1960-62	1966	1967	1968
		1,000 dollars		
Live animals	13,476	10,146	9,125	10,664
Cattle, sheep, and goats	13,396	10,098	9,038	10,655
Lebanon	11,206	5,517	6,462	2,099
USSR	944	2,168	--	--
Fruits and vegetables	86,577	103,507	137,987	133,198
Fruits and nuts	80,193	96,601	131,168	126,034
Oranges and tangerines	1/ 2,141	2,971	3,422	4,667
West Germany	1 651	775	756	1,196
Austria	--	682	1,127	1,603
Other citrus	714	2,390	3,168	3,924
West Germany	--	983	1,187	1,032
Edible nuts, fresh and dried	52,078	60,854	91,022	83,522
West Germany	20,564	24,464	42,527	40,760
USSR	167	7,813	12,640	14,405
United States	3,869	2,393	7,652	7,481
Figs, dried	5,819	6,550	7,234	6,951
France	1,670	2,097	2,162	2,034
West Germany	969	1,145	1,329	1,259
Raisins	19,106	22,064	22,683	22,805
United Kingdom	5,665	6,267	4,646	4,795
USSR	--	3,605	5,645	4,817
Vegetables	6,384	6,906	6,819	7,164
Pulses, dried	6,152	6.188	4,073	4,818
Lebanon	2,401	1,782	910	1,945
Italy	636	1,095	633	756
Sugar and preparations	14,997	8,119	7,770	2,267
Sugar, refined	13,700	6,902	6,238	1,453
Israel	3,764	4,228	1,944	--
Iraq	--	2,547	2,824	--
Feeding stuff for animals	10,685	20,935	25,382	20,272
Oilseed cake and meal	9,423	19,825	23,430	19,789
Switzerland	277	2,158	4,143	5,400
Denmark	4,172	4,719	8,014	5,393
West Germany	554	731	2,326	1,920
Tobacco, unmanufactured	82,913	107,555	117,962	94,805
United States	47,370	63,289	75,237	53,242
West Germany	9,562	13,264	8,893	13,476

Continued .....

Table 5.--Turkey: Value of principal agricultural exports by leading destination, average 1960-62, and annual 1966, 1967, and 1968--Continued

Commodity and destination	Average 1960-62	1966	1967	1968
		1,000 dollars		
des and skins	6,300	7,613	5,359	5,698
United States	1,277	1,372	1,385	1,463
Lebanon	402	1,248	274	358
tural fibers	69,753	137,925	140,341	148,045
ool and mohair	11,070	8,403	8,926	8,924
USSR	1,579	2,208	4,380	3,542
United Kingdom	6,025	1,703	1,202	1,026
France	963	882	289	--
otton	55,398	128,501	128,537	136,114
United Kingdom	7,099	25,216	16,422	16,422
Italy	16,831	16,105	15,972	10,486
West Germany	13,124	16,031	18,393	14,022
Switzerland	1,732	11,065	16,853	15,644
her agricultural exports	9,157	19,388	24,723	18,554
Total agricultural exports	300,606	415,188	468,649	433,503
onagricultural exports	48,856	75,271	53,651	63,315
Total exports	349,462	490,459	522,300	496,818

1/ 1960.
Source: State Institute of Statistics - Turkish Annual Trade Statistics.

he past 2 years (tables 7 and 8). This esulted almost entirely from reduced shipents of grains, oilseeds, and animal and egetable fats and oils. Increased domestic upplies were responsible for most of the eduction.

From July 1, 1954, through December 31, 968, the United States provided Turkey ith nearly $530 million worth of agricultural commodities through the P.L. 480 program. The main commodities were wheat ($284.8 million), fats and oils ($145.9 million), feedgrains ($22.4 million), rice ($3.5 million), and dairy products ($2.2 million).

U.S. imports were up during the decade. While there was a small increase in imports of fruits, vegetables and nuts, the main increase was in tobacco.

The United States has been Turkey's major tobacco customer, consistently taking approximately three-fifths of the crop (by value). During 1966-68, the U.S. share of Turkey's exports remained constant at approximately 17 percent.

AGRICULTURAL AND TRADE POLICIES

General Aims

The objectives of Turkey's agricultural policy are to meet all domestic food needs and increase agricultural exports to reduce the trade deficit and conserve foreign exchange reserves. While there have been no sweeping policy changes in recent years, two trends can be noted: heavy emphasis on raising the technical level of agriculture and increased price

Table 6.--Turkey: Value of principal agricultural imports by leading source, average 1960-62, and annual 1966, 1967, and 1968 1/

Commodity and origin	Average 1960-62	1966	1967	1968
	1,000 dollars			
Grains and preparation	42,526	18,985	1,957	--
Wheat	41,577	17,376	1,954	--
United States	40,802	17,376	1,939	--
Rice	619	1,609	--	--
United States	--	1,554	--	--
Coffee, tea, cocoa, and spices	6,849	2,239	1,524	2,837
Coffee	936	2,025	701	1,661
Brazil	734	2,025		1,014
Tea	5,478	3	--	--
India	5,418	3	--	--
Cocoa	301	66	823	950
Hides and skins	3,073	4,973	5,377	2,646
Hides, cattle	--	4,236	3,899	2,329
United States	2,207	4,159	3,727	1,008
Rubber	2,515	6,330	8,000	7,525
United States	--	--	4,939	4,334
United Kingdom	--	--	1,310	2,000
Natural fibers	16,681	13,108	11,654	9,958
Wool and animal hair	16,641	12,938	11,233	9,785
Australia	8,634	8,808	7,822	5,535
United Kingdom	4,271	2,544	2,112	2,088
Animal fats and oils	2,947	5,664	2,186	1,288
United States		5,659	2,140	1,189
Vegetable oil	7,322	10,212	1,294	252
Soybean oil	4,525	2,865	15	182
United States	4,525	2,380	--	--
Other agricultural imports	92	3,142	4,584	3,717
Total agricultural imports	82,005	64,656	36,576	28,223
Total imports	533,152	724,581	690,800	770,451

1/ It is recognized that there are some significant differences between the trade tables showing U.S. trade with Turkey and Turkey's total trade. This is because U.S. trade figures are gleaned from U.S. statistics while Turkish trade figures come both from official Turkish trade figures and United Nations statistics.

Source: State Institute of Statistics - Turkish Annual Trade Statistics.

Table 7.--U.S. agricultural exports to Turkey, average 1960-62, and annual 1966, 1967, and 1968

Commodity	Average 1960-62	Value 1966	1967	1968
	1,000 dollars			
ve animals (chicks)	--	3	5	16
at and meat preparations	17	18	16	24
iry products	980	2,180	4,562	6,680
ains and preparations	51,237	21,131	1,792	1,776
Wheat	50,050	17,611	834	575
Wheat flour	55	1,240	765	1,076
ides and skins	1,963	4,653	3,413	895
rude rubber	--	621	1,521	--
allow, inedible	850	6,261	444	1,001
egetable oils	6,916	3,123	1,338	1,333
Soybean oil	5,156	2,226	1,315	182
ther agricultural	365	191	254	505
Total agricultural	62,508	38,181	13,345	12,230
onagricultural	90,867	136,069	236,231	252,263
Total exports	153,375	174,250	249,576	264,693

Source: Foreign Agricultural Trade of the United States.

ntervention by the government to keep agriculture viable and competitive.

The general agricultural policy strives to improve the lot of the average farmer by providing technology and education. Successful implementation will increase the standard of living and improve the general nutritional level by increasing livestock and poultry production.

Trade Policy

Imports into Turkey are closely governed by both tariff and nontariff controls. For certain items--such as merino wool, coffee, and cattle hides--tariffs usually represent the difference between domestic price and import price. There also are taxes on imported goods, e.g., a pier tax and a stamp duty tax. There are no import levies on P.L. 480 purchases, but government distributing agencies mark up prices--a practice that is approximately equivalent to setting import levies. Imports of farm products also are restricted by rigid allocation of foreign exchange and licensing. Certain export products such as grain, flour, and margarine are regulated by licensing to assure adequate domestic supplies. Other farm products are not licensed, although some have to be registered to avoid export price fluctuations.

Economic development.--During Turkey's First Five-Year Plan starting in 1963, the growth target of 7 percent annually was almost reached. Annual GNP growth had been less than 5 percent previously. There also was substantial improvement in agriculture. Productivity increased due to high yields, and crop diversification was effective. Earlier, area expansion had been the main way of increasing production.

Expansion planned for the agricultural sector is 4.1 percent per year. Most effort is on increasing productivity of

Table 8.--U.S. agricultural imports from Turkey, average 1960-62, and annual 1966, 1967, and 1968

Commodity	Average 1960-62	Value 1966	Value 1967	Value 1968
		1,000 dollars		
Meat and meat preparations	179	34	10	50
Dairy products	2	22	11	51
Fruits, vegetables, and nuts	7,365	5,308	6,782	9,648
Pistachio nuts	3,012	2,350	3,463	3,941
Filberts	1,975	2,232	2,382	3,722
Tea and spices	94	598	641	313
Tobacco	48,401	60,218	60,462	62,679
Hides and skins	1,529	1,830	1,970	1,678
Oilseeds	152	345	0	439
Textile fibers	1,762	382	372	136
Wool and animal hair	1,617	287	114	136
Cotton	--	95	258	0
Animal and vegetable materials	176	1,542	1,547	922
Opium	176	1,404	776	
Vegetable oils	386	27	284	96
Olive oil	221	26	284	96
Beeswax	74	67	128	0
Essential oils	--	187	130	293
Other agricultural	2,960	--	--	706
Total agricultural	63,080	70,560	72,353	77,074
Nonagricultural	5,542	8,183	9,426	8,249
Total imports	68,622	78,743	81,779	85,323

Source: Foreign Agricultural Trade of the United States.

cereals, promoting industrial crops, and substantially improving a livestock industry. Exports and imports are slated to rise 7 percent annually. Whereas the First Five-Year Plan sought to increase agricultural exports, the Second Five-Year Plan seeks to expand industrial exports. Industry is being oriented toward the export market. Incentives to exporters and export promotion programs are coming into effect. But the lack of foreign exchange will continue to hinder broad expansion based on imported produce or machinery.

Turkey's industrialization is continuing vigorously. Thanks to a diversified investment program, private interests have an increasingly active role in new fields such as motor vehicles, chemicals, tires, and cement. Turkey's association with the European Economic Community (EEC) means more ready access to western ideas and markets. The 170,000 Turkish workers temporarily employed abroad, mainly in Germany, provide and will continue to provide Turkey with new and much needed skills for its developing economy.

The Second Five-Year Plan began in
. The planned GNP rate of growth has
kept at 7 percent. If the population
inues to grow at a rate of 2.6 percent,
actual growth will be 4.5 percent. And
e private consumption is expected to in-
se by 5 percent, the actual per capita
ease will be only 2.5 percent.

Annual rate of expansion of industry is
ned at 14 percent--a rate achieved dur-
the last 3 years of the First Plan. De-
e the planned industrial expansion and
expected dominance of industry by 1972,
t two-thirds of the population will
l be occupied with agriculture.

Economic assistance.--Turkey has re-
ed substantial aid from the United
es. Excluding military assistance, the
of loans and grants from 1945 through
was $2.4 billion. Other aid from Free
d countries on a bilateral basis total-
800 million, making a grand total of
2 billion in the 22 years. Only a small
nt of this total--6 to 7 percent--went
griculture, although agriculture bene-
ed from road construction and general
gram support. Direct agricultural aid
e through AID. AID assistance covers
y activities, including the Mexican
at program, fertilizer activities, irri-
ion projects, marketing projects, and
farm water projects.

Turkey became an associate member of
European Economic Community in 1964.
Tariff quotas established in 1965 for to-
bacco, raisins, and figs have since been
raised, while that for filberts remains
unchanged. Other commodities too have come
under quotas, tariffs, and agreements--all
of which are periodically reviewed and re-
negotiated. The EEC also makes low-interest
loans available to assist Turkey in its
overall development. Negotiations are now
being conducted on the transitional phase
of Turkey's association with the EEC, even-
tually leading to full membership.

Turkey receives aid from the Inter-
national Development Association (IDA) and
the International Monetary Fund (IMF). With
Iran, Pakistan, and the United States, Tur-
key is a member of the Central Treaty Or-
ganization (CENTO), which seeks peaceful
economic development through cooperative
efforts. Turkey also enjoys bilateral
trade agreements with the UAR, Israel, and
East European countries.

The Food and Agriculture Organization
of the United Nations has had a variety of
technical assistance projects for agricul-
ture in Turkey, including farm management,
farm credit, agricultural cooperatives,
production of vaccine for foot-and-mouth
disease, export marketing, and agricultural
planning. Though Turkey receives no direct
economic assistance from OECD, its member-
ship does entitle it to the benefits of
guidance and consultative assistance on
economic problems.

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ABSTRACT

Since the early 1950's Uruguay's agriculture has stagnated because of unfavorable prices received for the major farm products, especially wool and beef, the leading exports. These prices reflect not only unfavorable world prices but also Uruguay's foreign exchange and export tax policies, aimed at skimming off profits from low-cost agriculture to support high-cost industrie and social services. Uruguay's Agricultural Development Plan, 1965-74, proposed reforms to improve the position of agriculture, but not until 1968 was any serious effort made to carry out recommended adjustments of exchange rate and export taxes.

Measures in effect or under consideration that are aimed at increasing the productivity of agriculture include expanded extension and research services, supervised farm credit, land reform, and price policies to provide an incentive for raising output. A pasture improvement program initiated in 1960 has already demonstrated the profitability of improved livestock management. If these measures are carried out and economic and political stability is attained, agricultural production and exports may increase substantially during the next few years. The relative increase will probably be greater fo crops than for livestock products, but wool and beef will undoubtedly remain the principal sources of farm income and foreign exchange.

Key Words: Agricultural development plans, Agricultural policies, Land refor Pasture management, Farming practices, and Farm export taxes.

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PREFACE

Uruguay supplies both wool and beef to the U.S. market. Although U.S. agricultural exports to Uruguay are relatively unimportant in most years, they supplement Uruguay's production in periods of unfavorable weather in the Southern Hemisphere.

Publication of agricultural statistics by the Government of Uruguay sinc the early 1960's has been sporadic, although publications issued in 1967 on the Agricultural Development Plan, 1965-74, give data for the principal crops Production and trade estimates for the mid-1960's in this report usually come from secondary sources. Although the data often differ slightly from one source to another, they are nevertheless believed to give a reasonably good indication of the level of supplies in any one year and the general trend ove the years.

Metric units used in this report are given below with their equivalents:

1 metric ton (10 quintals or 1,000 kilograms) = 2,204.6 pounds

1 hectare = 2.471 acres

1 kilometer = 0.6214 mile

1 meter = 39.37 inches

1 square kilometer = 0.386 square mile

All photographs except figure 3 were provided by Precedent Films, Inc., Parina 65, Buenos Aires, Argentina. Figure 3, courtesy of Dale Farringer, Foreign Agricultural Service, U.S. Department of Agriculture.

SUMMARY

Since 1950, continued stagnation of agriculture in Uruguay has led to the ppearance of the prosperity and economic stability long characteristic of country. The source of economic strength in 1950 was still cattle and p raising; wool and beef alone accounted for about four-fifths of Uruguay's rts in that year. And despite this heavy dependence on only two agri- ural products, the country had achieved a relatively high per capita gross onal product.

The stagnation that has occurred in the agricultural sector in the last ears is traceable chiefly to the unfavorable prices received by producers ajor farm products--prices that reflect both the decline in world agri- ural prices from levels reached during the Korean war boom and Uruguay's eign-exchange and export-tax policies. These policies were designed to ther the redistribution of incomes generated in low-cost agriculture for purpose of supporting high-cost industries and social services. However, discouraged investment in agriculture and agricultural output declined. lation became rampant, and the balance of payments deteriorated.

Uruguay's Agricultural Development Plan, 1965-74, which proposes policy administrative reforms to improve agricultural conditions, includes ommendations on the exchange-rate and export-tax policies. Not until 1968, ever, did the Government make a serious effort to adjust them.

Agriculture is still based for the most part on extensive production hods. Unit yields for crops and livestock are low, reflecting the failure apply modern techniques on a broad scale. Proposed programs aimed at sing yields emphasize expanded extension and research services, supervised m credit, land reform, and product and input prices that will provide an entive to increase production. A pasture improvement program, initiated 1960, has been successful in demonstrating the profitability of improving tures and updating the care and management of cattle.

More than nine-tenths of Uruguay's agricultural area is in pasture, and oduction of livestock for beef and wool continues to be the leading farm terprise. Wheat and oilseeds are the principal cash crops. Rice and lseeds provide the principal crop exports except in good crop years, when eat is exported also. Agricultural imports usually consist mainly of sugar, tton, tobacco, yerba maté, bananas, and rubber. Sometimes, in years of poor ain harvests, wheat is the leading import.

The future of Uruguay's agriculture will depend on the degree of economic d political stability the country attains. Assuming progress is made in ese areas and reasonably good weather conditions prevail, crop production and ports may well increase substantially over the next few years. Wool and beef, wever, will doubtless remain the major sources of foreign exchange. If the reign exchange and tax situations are dealt with as contemplated in the 10- ar development plan, and the pasture improvement program continues, livestock oducts could spark economic recovery and growth in the coming years.

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A SURVEY OF AGRICULTURE IN URUGUAY

Special Projects Branch
Foreign Regional Analysis Division
Economic Research Service

INTRODUCTION

The Oriental Republic of Uruguay is one of the world's important producers nd exporters of wool, as well as a significant exporter of beef. Although rop production and light industry are important sectors of the economy, it is ne livestock industry that has provided the foreign exchange, as well as the ocal funds, for Uruguay's development.

Uruguay, with an area of only 18.7 million hectares, is small compared ith its two large neighbors--Argentina to the south and Brazil to the north. ts population of 2.8 million is small, too, compared with that of other ountries in South America, but is homogeneous and has a long domocratic tradi- ion. Seemingly prosperous and socially advanced, the country was known as a aradise during the early years of this century. But a siphoning off of agri- ultural earnings to maintain a burgeoning welfare state, ever-increasing nflation, and declining levels of exchange earnings brought on a period of tagnation, particularly in agriculture. A start has been made, under the eadership of President Jorge Pacheco-Areco, toward the adoption of policies nd programs that could lead to economic improvement.

Historical Relationships (1) (3) 1/

The war-like Charrua Indians peopled the east bank of the Río de la Plata and the Uruguay River (the Banda Oriental, as the area was first called) when the Spaniards first penetrated the region in 1516. Because there was no prospect of quick riches from mineral resources in the area, it was another hundred years before scattered settlements appeared. In 1603, the Governor of Paraguay reportedly shipped 100 cattle and some horses into the Banda Oriental. These animals multiplied and ran wild, and their descendants tempted the gauchos (cowboys) from across the river in Argentina and Paraguay to hunt them for their hides. Later in the 17th century, the Portuguese from Brazil began to move south. A struggle for the territory developed between the Spaniards and the Portuguese that was not settled until 1828, when Uruguay became an independent country--the República Oriental del Uruguay.

1/ Underscored numbers in parentheses refer to the numbered listings in the bibliography, p. 52. For additional details on historical developments and current problems affecting the agriculture of Uruguay, the reader is referred especially to items (1) and (3).

Internal strife continued, however, and the two political parties that are still important were soon delineated--the Colorados, representing mainly the urban population interested in industrialization and protectionism, and the Blancos, representing mainly the rural, conservative elements. A strong president came into power in 1903, however, who brought stability to the country and influenced the future social, political, and economic philosophy of Uruguay. He was able to implement many of his advanced ideas of government and social legislation during his second term of office, which began in 1911.

In Uruguay, the first two decades of the 20th century were characterized by political and monetary stability, extensive social services, and a generally high standard of living compared with that of other Latin American countries. The depression of the 1930's brought problems, and the Government began to encourage the development of light industries in an effort to reduce imports. Incentives and institutional support essential for agricultural development were neglected, however, and a progressive stagnation of agriculture was interrupted only briefly by the Korean war boom of the early 1950's. President Pacheco, who took office in December 1967, seems willing to take unpopular measures to stem inflation and foster economic recovery.

Constitutional changes have modified the structure of the Government several times. The latest change was in 1967, when executive responsibility was again vested in a single president. This change followed a 15-year period of rule by a nine-man executive council.

Uruguay is an active participant in international and Western Hemisphere organizations, particularly the United Nations and the Organization of American States (OAS), and is committed to the principles of democratic government. Montevideo, Uruguay's capital, is the seat of the headquarters of the Latin American Free Trade Association (LAFTA). 2/

Nature of the Economy

Uruguay's economy has always been based on its agriculture, particularly the livestock sector. Processed and unprocessed farm products account for more than 90 percent of the value of all commodity exports. Even in 1967, farm products brought in nearly five times as much foreign exchange as tourism, which is the only other important source of foreign earnings.

Lack of mineral resources has severely limited development of heavy industries in Uruguay. The development of light industries that began in the 1930's was based primarily on enterprises producing foods, beverages, textiles, and footwear--all using agricultural raw materials. Agriculture's share in both the labor force and the gross domestic product is less than a fifth and thus understates the importance of agriculture as a source of employment and income.

Agriculture developed rapidly during the early years of the 20th century, and supplied the capital for Uruguay's economic and social advancement. But

2/ Present members are Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

ce the mid-1930's, the Government has been strongly oriented to the needs the industrial sector. Continued spending for industrial development and fare led during the 1960's to large-scale deficit financing, runaway lation, and drastic depreciation of the exchange rate. Between 1960 and 4, gross domestic product (in constant 1963 prices) declined at a cumulative ual rate of 0.4 percent. Prices that had slightly more than doubled between 5 and 1955 were almost 18 times as high in 1966 as in 1955 (1). Agricultural orts dropped in both volume and value.

During the late 1950's and early 1960's there was a growing awareness in guay of the need for drastic action to correct the country's basic problems. Investment and Economic Development Commission (Comisión de Inversiones y arrollo Económico, known as CIDE), created by the Government in 1959, began rogram of research in 1962 which was to serve as a basis for economic velopment of the country. Cooperating in this work were various national ganizations and institutes, as well as technicians from the OAS, the Economic mission for Latin America, and the Inter-American Development Bank. A mprehensive national development plan, completed in October 1965 and covering 5-74, calls for improved economic policies and increased public investment high-priority fields, including agriculture. The importance of expanding ricultural exports to achieve economic growth and the fact that increased ports depend on more adequate pricing of farm products and higher agri- ltural output were recognized in the development plan. Legislative approval quired to implement a number of the plan recommendations has been given. ee discussions later in this report on Agricultural Policies and Institutions, nd Reform, Major Crops, and Foreign Trade in Farm Products for details of e plan as they relate to agriculture.)

ysical Environment

Uruguay is located on the east coast of South America, entirely within e South Temperate Zone. Its area and population are somewhat larger than ose of the State of Oklahoma. The Uruguay River, which flows south and pties into the Río de la Plata and then east to the Atlantic Ocean, forms e western and southern boundary between Uruguay and Argentina. The population s largely of European extraction, and more than half the people live in the outhern coastal belt. The seaport capital of Montevideo is the social and conomic center of the nation.

Topography--Uruguay, an extension of the Argentine Pampa, is principally reeless grassland. The southern two-thirds consist largely of undulating lains, interrupted by valleys of small rivers and streams and rounded hills. he northern third, an extension of the Brazilian highlands, is more rugged ut elevations rarely exceed 300 meters. The grass-covered hills and table- ands (fig. 1) are best suited for permanent pasture, but some are capable of ultivation. The highland area turns south at its eastern end and continues s a low range of mountains called the Cuchilla Grande (Big Knife), which runs lmost to the coast and divides Uruguay into two main watersheds, the larger eing to the west. The principal river is the Río Negro, which flows from the ortheast to the southwest and empties into the Uruguay. The Río Cebollatí, he main drainage east of the Cuchilla Grande, flows northeasterly and empties nto Lake Merín.

Figure 1.--Pasture grass is lush when moisture is adequate. Cattle and sheep run together in the same pasture in Uruguay, unlike the practice in most countries, where sheep follow cattle.

Climate--Despite its location in the Temperate Zone, Uruguay has a climate that is considered humid subtropical. Frosts are frequent but snowfall is rare. Winters are usually mild; the short summers are warm--sometimes hot in the interior. July is the coldest month, with temperatures averaging about 50°F. January is the warmest month, with a temperature range from 70°F. at Punta del Este in the south to 80°F. at Artigas in the north. Windiness is a characteristic of the weather in both summer and winter. In summer, the winds temper the high midday temperatures; and in winter, the chill winds from the south bring periods of cold weather. In all seasons, sudden shifts in wind direction contribute to frequent day-to-day changes and considerable variation in temperature.

Uruguay usually receives sufficient rain during the year, with an annual rainfall of more than 40 inches in the northeastern two-thirds of the country and 30 inches in the southwest. Although the average rainfall by month appears to be well distributed throughout the year, there may be heavy showers or torrential rains, concentrated in a few days and followed by a month or more of dry weather. Annual averages also conceal erratic patterns of rainfall.

asional droughts cause severe damage to crops and pastures, and heavy
nfall in some years results in floods that destroy crops and livestock.
n for nearly five decades indicate that in about 1 year out of 6, summer
nfall is less than 6.5 inches and annual rainfall is less than 34.3 inches.
n low rainfall is combined with high temperature and persistent, drying
ds, drought conditions become severe. Also, loss of water through runoff
loss of soil through erosion are major problems, especially in cultivated
as.

Wet and dry periods and low temperatures sometimes occur in the same crop
son, as in 1966/67, when excessive rain in December 1966 damaged wheat and
er small grains. Dry weather in early 1967 stunted corn and pastures.
ns in May broke the drought, but were followed by freezes and then by floods.
harvest was poor and many animals died from starvation, disease, freezing,
drowning.

Even during normal seasons, however, Uruguay's climate is not favorable
some of the subtropical and temperate-region crops. Spring droughts and
vy autumn rains may damage the cotton crop, and extreme variations in rain-
l and temperature affect tobacco. Corn does not thrive in Uruguay, although
is widely grown. Apple and grape output, especially in the south, is some-
es reduced sharply by drought, as was the case in early 1969. Grass appears
ter adapted to the climate than other unirrigated crops, but its growth is
quently arrested by periods of drought or cold weather.

Soils--Since no significant mineral resources have been discovered in
guay, the soil has been the country's principal source of wealth. Most of
soils are suitable for crop production, although the topsoil is of varying
th and in many areas it is subject to erosion. Brunizems, which cover about
f of the country, are well-suited for grazing and in some places for crop
duction. They are fertile soils with thick, dark-colored silty or loamy
face layers over a somewhat finer textured but permeable subsoil. The
musols, which are most extensive in the northwest, are black to dark gray
stic clays; they are generally well supplied with plant nutrients, but are
fficult to work because they are sticky when wet and hard when dry.

The association of Humic Gley and Alluvial soils is scattered in small
eas near the coast and along the streams. The Humic Gley soils are dark-
lored, poorly drained, but fertile soils with organic matter in the surface
yer. Artificial drainage and water control, however, are required for
tisfactory crop production from these soils. The Alluvial soils are well-
ained and fertile, although many are subject to flooding. Planosols occur
stly on level or nearly level areas in the east. They have dark silty or
amy surface layers over a nearly impermeable clayey subsoil that makes
tificial drainage necessary for satisfactory crop production. Lithosols and
allow or stony Brunizems on some of the rolling and hilly areas provide
mited grazing but have little, if any, potential for crop production.

Uruguay has magnificent sandy beaches in the south and along the Atlantic
ean that attract vacationers from neighboring Argentina and Brazil. Tourism
s second only to agriculture as a source of foreign exchange.

People and Labor Supply

As mentioned earlier, the original inhabitants of the Uruguayan region were the Charrua Indians, a tribe of nomadic hunters. Spaniards from Argentina and Paraguay spilled over into the land in the 18th century, and Portuguese moved south from Brazil. Together they eliminated the Indians. Heavy immigration from Italy occurred during the 18th and early 19th centuries, and considerable numbers of French and other European nationals also settled in Uruguay. The population of 2.8 million is now largely of European extraction and is growing at an annual rate of 1.3 percent, a much lower rate than obtains in most countries of Latin America.

Number of farmworkers--The rural population of Uruguay is declining both in actual numbers and as a percentage of total population; about 45 percent of all Uruguayans live in Montevideo. Although the total population rose by 16 percent from 1951 to 1961, the number of people on farms of 1 hectare or more dropped some 11 percent during this period. The decline has generally been associated with lack of employment for family members on the many small farms and with labor-saving innovations on larger farms, including mechanization of crop production and shifts to a more extensive type of ranching. Low net returns after taxes from farming operations have also discouraged many farmers from making the improvements or using the labor necessary to ensure an efficient enterprise. Migration to urban areas has resulted.

Out of a total labor force of just over a million in October 1963, according to the latest population census, persons employed in agriculture, forestry, and fishing accounted for just under 18 percent. The total number of people actively employed in agriculture included relatively few unpaid family workers and still fewer women (7.4 percent and 4 percent, respectively). These percentage shares may understate the relative importance of family labor on farms because of the choice of enumeration dates and census definitions. Farm labor activity is slack in October, and had the census been taken at the peak of activity, in March-May, family members would no doubt have represented a larger share of the total farm labor force. Although not using a strictly comparable definition, the agricultural census of 1961, taken in May, lists 52,000 females working on farms, or 24 percent of the agricultural labor force on farms of 1 hectare or more in size. May ends the 3-month period during which farmers harvest corn, grain sorghum, rice, sunflower seed, peanuts, sweet potatoes, and grapes. In that period they also plant truck crops and prepare the land for and start sowing small grains and flaxseed. By October, on the other hand, most of the summer crops have been planted and winter crops are still growing. Livestock also require less labor in October, when shearing begins, than in May, when livestock are branded.

Uruguay's agricultural planning authorities estimate there were 185,000 economically active persons in the agricultural and forestry sector in 1963. They say there is still considerable unemployment and underemployment in rural areas in most months, and possibly as many as 4 percent of the workers could be classed as "surplus" even in the busy months of March, April, and May.

Working and living conditions--Families on small farms, whose land provides their principal source of employment and income, account for about

-fourth of all families dependent on agriculture. These, as well as more
n half the families dependent mainly on agricultural wages, live in poverty.
e farm wageworkers have a little land, usually cultivated on a subsistence
is. The great majority, however, neither own nor rent land. Farm wage-
kers are considered inferior to small farmers on the social scale, but
erior on the economic scale, as they generally have better food and housing.

Although most workers in agricultural processing industries are highly
anized, the trade union movement has made little progress in the Uruguayan
ntryside. Sugar beet fieldworkers were organized in the late 1950's. The
y other organization of rural workers, so far as is known, is the Movement
Rural Action, formed in the 1960's and believed to have few actual farmers
farm wageworkers as members.

Minimum farm wages are fixed by the Government but are low compared with
ustrial wages; and in remote areas, especially, the rates are difficult to
orce. An Executive Decree of December 31, 1968, established new levels of
aries and living conditions for rural workers, effective February 1, 1969.
es for common laborers range from 234 to 328 pesos per day (the exchange
e during 1969 and early 1970 varied between 249.5 and 250 Uruguayan pesos
US$1). Living quarters and food are provided by the employer.

The poorest rural inhabitants live in rancherías, small shantytowns
ated mainly in the stock-raising north. These are inhabited partly by
kers who hire out at sheep shearing and other seasonal jobs, and partly
the families of other workers who are themselves required to live on the
m where they work. The resident workers live in poor houses, are provided
h meat and some other food that they must cook for themselves, and are
owed to see their families only once a week. The family members on the
ncherías receive no rations. The estimated population of the rancherías in
1 was 100,000, or more than one-fifth of the persons living on all farms
rancherías.

Labor productivity on farms reportedly averages about 20 percent below
e level for the economy as a whole, but productivity in large ranching
erations is said to be relatively high compared with that on farms and
nches of less than 50 hectares.

The literacy rate for Uruguay is estimated at 93 percent--the highest in
tin America--but this figure has little reality for the poorer farmers and
rmworkers in the rural areas. People living on the rancherías, for example,
uld probably be classified as largely functionally illiterate. Although
imary education is obligatory, education in rural areas is provided through
ly the third grade. Pupils from the poorer rural areas cannot afford to go
urban schools to finish even their primary education.

For the country as a whole, the level of food consumption is higher than
any other country in Latin America except Argentina. Estimated per capita
lorie intake averages 2,885 calories daily, and animal protein consumption
high. Uruguay's meat consumption is estimated to be the highest in the
stern Hemisphere, possibly in the world. But for the farmworker, particularly
e seasonal worker, consumption of vegetables and fruit and other protective
oods falls below the high average for the country. Even so, food supplies

available to the rural worker are greater than for his counterpart in most other Latin American nations, although his housing facilities probably are little if any better in quality.

AGRICULTURAL POLICIES AND INSTITUTIONS

Government policy in Uruguay over the years has sought to maintain a stable democratic system, provide extensive social benefits to Uruguayan citizens, foster exports, and diversify the country's economy by promoting its industry. Unfortunately, much of this effort has been at the expense of agriculture, which has received little attention or encouragement until recently. Particularly since the early 1950's, the Government has used exchange policy, including export taxes, to siphon off profits from wool and cattle production and, to a lesser extent, profits from oilseed and wheat output.

Despite some aid given to agriculture, especially during the 1960's, the net result of Government policies to encourage production and exports of farm products has been limited. According to official estimates for 1955-64, the value of farm output at 1963 prices exceeded the 1955 level in one year only (1963), and then by only 3 percent. Since 1963, it has remained below the 195 level. Agricultural exports have also stagnated since the late 1950's, fluctuating in value from 40 percent (1959) to 69 percent (1965) of the record set in 1953.

The current National Development Plan, 1965-74, however, is giving increased emphasis to investment in the agricultural sector, and many of the infrastructure projects under construction or in prospect will benefit agriculture. Improvements in agricultural research, extension services, and education are planned; farm credit and crop-storage facilities are receiving increased financing; and nontraditional exports are being promoted. The program is being financed largely with outside assistance, partly from the United States and partly from international organizations.

Agricultural Policies

Despite the relative lack of emphasis it has placed on the agricultural sector of the economy, the Uruguayan Government has long given some assistance to agriculture in an effort to diversify production and enable the country to become more self-sufficient in food. The Government protects farmers against competition from foreign producers and establishes support prices or direct subsidies for various crops and livestock products (3). It also works through the National Subsistence and Price Control Council to hold down consumer prices. The Council operates its own stores and also controls the prices of fruits and vegetables in the weekly street markets of Montevideo and other towns.

Aid to agriculture has come to include not only price support but also some limited programs to improve farming techniques. To finance these programs, a small share of the total taxes collected on agricultural exports in the 1960's has been allocated to the Agricultural Development Fund. Funds have been used largely for fertilizer subsidies, but also for improved seed, cattle improvement, research, and the extension service, which is still in an early stage of development.

Although the extension service was expanded in 1967, it included after xpansion only 48 agronomists, each assigned to provide crop information and ssistance in one of the country's 48 crop areas. In 1967, there were 35 egional veterinary offices, each office covering 500,000 hectares and having staff that included two veterinarians and 15 assistants. The Ministry of griculture has three experiment stations--one for livestock, another for ield crop research, and the third for horticultural crop research. The gricultural and veterinary colleges at the University of the Republic of ruguay in Montevideo also have experiment stations for crop and livestock esearch. Research findings on techniques and practices that would help armers increase per unit yields have been meager thus far.

The Government requested the World Bank (International Bank for Reconstruction and Development) and the FAO (United Nations' Food and Agriculture rganization) some 20 years ago to survey the country's agricultural problems nd recommend solutions. A joint World Bank/FAO agricultural mission went to ruguay and in 1951 submitted a report that resulted in formulation of a ivestock improvement program known as the Plan Agropecuario (Agricultural lan), to be financed with the help of a World Bank loan.3/ Although the ank and the Uruguayan Government agreed on the Plan Agropecuario in 1954, he loan agreement was not signed until the end of 1959 and the legislature ook an additional year to ratify it. This plan has received enthusiastic upport from most ranchers who participated and has been so successful that n additional World Bank loan was obtained in 1965 to extend the program to ther ranchers. (See section on Livestock and Products later in this report.) stimates indicate that as a result of improvements under the Plan Agropecuario, he annual average net return to the Uruguayan economy would increase about 7 percent over a 10-year period.

By the mid-1960's, the general stagnation in the agricultural sector had xtended to other parts of the economy, and the Government began to seek ways o stimulate economic growth. A national plan of economic and social develop- ent, covering 1965-74, was recommended by the Government-appointed Commission f Investments and Economic Development (CIDE); by the end of 1968, the egislature had approved a number of the plan recommendations.

A major portion of this national plan is the Agricultural Development lan, 1965-74, which proposes policy and administrative reforms for agri- ultural programs. One of the principal aims of this plan is expanded agri- ultural output as a basis for enlarged exports. It includes general outlines or 10 major farm programs: Research, extension, certified seed, agrarian eform, farm credit, and programs aimed at raising yields of grains, oilseeds, ugar, wine grapes, and livestock. Agricultural research and extension ervices are to be coordinated in the Ministry of Agriculture by the Agri- ultural Research and Extension Division, set up in the mid-1960's. It will facilitate not only the flow of research results to farmers, but also a everse flow of information from farmers. The information from the farmers

3/ Spanish name is used for this plan to distinguish it from the Agricultural Development Plan, 1965-74, drawn up as a part of the national plan of economic and social development.

will help identify the problems that need research and the economic obstacles in applying improved techniques.

Additional details of the Agricultural Development Plan, 1965-74, are discussed in other sections of this report. Inflation has delayed implementation of much of the plan, including the important programs for expanding farm credit, linking it to greater use of inputs, and for intensifying agricultural research and experimentation. By forcing drastic stabilization measures in 1967/68, however, inflation hastened the devaluation of the exchange rate, an action essential to assure the adequate farm prices needed for agricultural development.

Farm organizations--Uruguay has two important general farm organizations for the larger ranchers and landowners: The Uruguayan Rural Federation, which speaks chiefly for the livestock producers and disagrees with the aims of agrarian reform; and the Rural Association of Uruguay, which functions primarily as an official registry for pure-bred stock. Operating on a smaller scale are the Federal League for Rural Action, and the National Commission for Rural Development. The former, founded by members of the Rural Federation and the Rural Association for the purpose of representing the small producers (9), became active politically in the early 1930's, and has had some influence in Government circles. Although the influence of the once-important National Commission for Rural Development, which represents the interests of organizations of small farmers, has declined, it is still considered one of the four main farm organizations. A fifth organization, the Farm Confederation of Uruguay, was formed in 1968 and is composed of 12 agricultural societies, most of which are for truck farmers.

Agricultural cooperatives and a few agricultural commodity associations have considerable importance in Uruguay. In 1967, there were 150 agricultural cooperatives with about 40,000 members, double the number of members in 1961. Most of these cooperatives are affiliated with the National Federation of Livestock and Crop Cooperatives; however, a small group of former affiliates has broken off to form a rival organization, the Uruguay Federation of Livestock and Crop Cooperatives. Membership in these societies is large compared with that of farm organizations in other Latin American countries. The cooperative movement, however, has not been particularly successful in representing the needs of small farmers, partly because of Government policies and legislation placing limitations on the capitalization of cooperatives. Under the Agricultural Development Plan, 1965-74, however, cooperatives are to be encouraged by proposed governing legislation that will ensure adequate financing.

The Rice Growers' Association has some influence on producer prices and the Poultry Association, South, has successfully exported eggs and frozen chickens since 1963 to Argentina, other South American countries, and Europe. The Farm Confederation of Uruguay, mentioned above, is in effect a commodity association. It helps truck farmers find markets at home and abroad, and assists in obtaining legislation to protect their interests.

Farm credit--The supply of credit to farmers in Uruguay is one of the keys to increased agricultural output. The more readily available sources

f credit to small farmers are the merchants selling agricultural inputs. hese merchants sell their goods to small farmers on credit, with the provision hat payment in full must be made at the end of the harvest season. Prices re often set at abnormally high levels for credit purchases, and the farmer sually must sell his products through the creditor immediately after harvest, hen prices are at their lowest level. Private banks provide only production redit, with the loans repayable in 6 to 12 months. Interest rates from this ource in the mid-1960's were generally 30 percent per year or more. Detailed ata are not available either for private banking credit to farmers or for he credit advanced by merchants for purchases of fertilizer, seeds, and other roduction requisites.

The Bank of the Republic replaced the National Mortgage Bank as the main ource of public farm credit in 1946 and has since been gaining in relative mportance. In 1964, for example, it provided 88.1 percent of the farm credit dvanced by public agencies, compared with 8.5 percent for the National ortgage Bank and some 3.4 percent provided by the Plan Agropecuario. The egulations and procedures of the Bank of the Republic are cumbersome, owever--there are some 34 different formulas for determining loan eligibility nd conditions. The Bank's minimum interest rate in 1967 varied from 7.0 o 8.5 percent, and the repayment periods varied from 3 months to 4 years. he interest rate for the supervised credit advanced by the Plan Agropecuario, n contrast, is 3 percent per year. This credit, unlike so-called "production redit," is for long-term (7-year) financing for improvement and rehabilitation of pastureland. In addition to the three public agencies listed above, he National Colonization Institute provides some farm credit to encourage olonization.

In relation to agricultural output, total farm credit provided by public gencies has declined since the mid-1950's. Farmers apparently do not give riority to production inputs in assessing their credit needs, although wheat armers increased the area sown to that crop in 1964/65 in response to a pecial credit program instituted by the Bank of the Republic. The Bank made oans to wheat farmers for seed, fertilizers, weedkillers, insecticides, ungicides, and harvesting and other related expenses (see section on Wheat). he Bank extended the program in 1965 to include flaxseed, sunflower seed, eanuts, malting barley, corn, and grain sorghums. Bad weather, however, revented area expansion through the 1967/68 season.

The Agricultural Development Plan, 1965-74, stresses the increased use f supervised credit to encourage development of the agricultural sector.

Trade policies--The Uruguayan Government has long intervened in the ountry's agricultural import and export trade through tariffs for protection nd revenue purposes (3). Since the 1930's, it has imposed strict exchange ontrols as well as quantitative import restrictions from time to time. Trade olicy is influenced to a large degree by a traditional balance-of-payments eficit. Nonessential imports are discouraged by high duties, and the flow f imports is controlled by a series of graduated surtaxes, prior deposits, nd exchange surcharges. Most of the basic import duties are assessed on an fficial valuation (aforo) expressed in Uruguayan pesos per kilogram. ccasionally, ad valorem duties are assessed based on the c.i.f. value. The

ad valorem surcharges are sometimes based on an "official" c.i.f. value determined by Uruguayan authorities (16).

Exchange controls involved multiple rates for imports and exports until December 1959, when the Government instituted a unified exchange market combined with surcharges and prior deposits on imports, and varying taxes (detracciones) on the traditional basic exports. The change in the system of controls formed a part of a stabilization program designed to halt inflation and correct the disequilibrium in Uruguay's balance of payments that had persisted since 1955 and had sharply reduced foreign exchange reserves. Inflationary pressure intensified, however, and the balance of payments continued to deteriorate. Inflation soared in 1967, accelerated mainly by a large budget deficit and poor weather for crops and livestock. The official peso buying rate per U.S. dollar, which stood at 11 pesos in 1963, was progressively raised to 250 pesos by the end of April 1968. A stabilization program, supported in 1967 by foreign assistance, was strengthened in June 1968 by a freeze on prices and wages and a tightening of controls on the sale of foreign exchange by banks and exchange houses. The cost of living rose only slowly during the latter half of 1968. Public resistance to tight controls in early 1969 was strong, but by the end of the year, the public began to appreciate the benefits of inflation controls and appeared more willing than before to accept them.

Proceeds from the export of the "basic" products (wool, flaxseed, sunflower seed, wheat, peanuts, and byproducts of these commodities, as well as beef, dry and salted cowhides, and sheepskins) must be delivered to the monetary authorities, who withhold the export taxes (retentiones or detracciones). Legislation adopted in October 1968 provides for the gradual replacement of these taxes on basic exports by a tax based on the production potential of the owners' land. This productivity tax, however, is to be collected initially through a system of withholding funds from export proceeds. Export taxes on wool are being replaced first, over a 3-year period which began October 1, 1968. Export taxes on other basic products are gradually being replaced also. The new tax structure is expected to stimulate agricultural production and exports, but its effects will be gradual over a period of years.

In 1953, Uruguay became a contracting party to the General Agreement on Tariffs and Trade (GATT). Certain tariff concessions by Uruguay under this agreement benefit U.S. products. Uruguay is also a charter member of the Latin American Free Trade Association. Uruguay both gives and receives preferential treatment on trade with other LAFTA members. Preferential treatment given by Uruguay includes reduced prior deposits on all imports and preferential tariffs on some (4).

Uruguay has several bilateral agreements. With particular reference to agriculture, for example, Uruguay and Brazil have signed agreements from time to time for the sale of Uruguayan wheat to Brazil. The last such agreement was signed on November 25, 1968, for a 1-year period.

Foreign Aid

Between 1949 and the end of 1968, Uruguay received the equivalent of more than US$280 million in external aid; about half came from international

ncies, notably the World Bank, and about half from the United States. ect aid for agriculture accounts for a relatively small share of total ernal aid to Uruguay. It does include, however, financing for one of the e promising international agricultural aid projects, the pasture improvement gram. World Bank loans in 1960 and 1965 for this purpose totaled US$19.7 lion (see section on Livestock and Products).

Other large sums advanced for agricultural development include US$5.6 lion from the Inter-American Development Bank in 1964 for crop and live- ck production and expansion of the dairy industry; US$15 million from the ted States in 1968 for importing agricultural machinery, equipment, seeds, sticides, and other agricultural aids with the understanding that pesos nerated from the sale of the imported commodities be used for farm credit; l US$5 million from the United States for fertilizer imports, authorized 1966 but first used in 1968.

Portions of the two U.S. dollar loans are to be used to support the sture improvement program. Also, the Uruguayan currency required by e World Bank and the Inter-American Development Bank for their agricultural ograms have been partly supplied by using some of the peso proceeds from the L. 480 4/ sales agreements, signed in January and May 1968. Some of the so proceeds are being invested in other agricultural projects. The first L. 480 investment agreement, signed in June 1968, provides for building il-testing laboratories and other facilities for the soil work needed to velop a good basis for a land productivity tax and to assist farmers in proving their use of land.

The January 1968 P.L. 480 sales agreement, mentioned above, called for uguay to undertake a number of self-help measures, including legislation, ssed in June 1968, on soil and water conservation, seeds, and fertilizer; gislation, passed in October 1968, establishing a tax on land productivity permit the gradual reduction and eventual abolition of the existing export xes on traditional export commodities; and legislation on tenancy and operatives, still under legislative study at the end of 1969.

Agriculture has received technical assistance as well as capital aid rom both the United States and international organizations. FAO has been articularly active in providing technical assistance.

ORGANIZATION OF AGRICULTURE

and Use and Types of Farms

Uruguay's topography, climate, and soils are relatively more suitable or grass than for field crops. Almost 90 percent of the total area of the ountry is classified as agricultural land, and some 90 percent of the agri- ultural land is in pasture (table 1).

Pasture area has apparently been increasing since the mid-1950's, with he share of crops for harvest dropping from 10 to 8 percent between the

4/ U.S. Agricultural Trade Development and Assistance Act of 1954.

Table 1.--Land use in Uruguay, 1956, 1961, and 1963

Use	1956 1/	1961 1/	1963 2/
	1,000 hectares		
Land in farms:			
Agricultural land--			
Planted for harvest	1,641	1,344	1,275
Arable pasture	728	767	na
Permanent grassland	13,589	13,988	14,325
Natural woods and forests	434	456	na
Total agricultural land	16,392	16,555	na
Other land in farms	367	434	na
Total land in farms	16,759	3/ 16,988	na
Other land	1,934	1,705	na
Grand total	18,693	18,693	18,693

na = data not available.

1/ Estimates based on census data as printed in the Agricultural Development Plan, 1965-74, publications. The plan publications appear to revise slightly some of the census data printed earlier (September 1963); these, in turn, differ somewhat from the annual estimates for 1956 and 1961. Both sources include in the area for pasture the natural woods and forests on farms.

2/ Estimates for 1963 were from the plan publications and are probably not strictly comparable with census data.

3/ Items do not add to total because of rounding.

Sources: (14) (15).

census years 1956 and 1961, and probably reaching a still lower level in 1963. Grains for food and for livestock feed occupy most of the area planted to crops for harvest. The Agricultural Development Plan for 1965-74 (mentioned earlier in Agricultural Policies) calls for the area in crops for harvest to recover at the expense of pasture, and for pastures to be improved (table 2).

At their highest level, the 1974 projections for both crop area and pasture area fall short of the potential area that would result if the soils were also managed so as to protect them from erosion and improve their natural fertility. The potentially arable area of almost 3.4 million hectares, in turn, falls short of the maximum cultivable area, estimated at from 5.2 to 6.6 million hectares. This maximum cultivable area, according to agricultural plan technicians, should be used in rotation between crops and pasture so that in any one year the maximum area that could be devoted to annual crops would total between 3.0 and 3.8 million hectares, or only 19 to 24 percent of the agricultural land (excluding woodland pastures). Even after deducting artificial pasture (annual grasses) from permanent pastures, there would

Table 2.--Projected land use, Uruguay, 1974, and estimated potential

Agricultural land	1974 projections 1/		Estimated potential 2/
	Without agrarian reform	With agrarian reform	
	1,000 hectares		
ble land:			
rops for harvest	1,676	1,786	2,985
nnual grasses 3/	600	465	390
Total arable land	2,276	2,251	3,375
manent pastures: 4/			
rtificial	810	1,500	2,400
Natural, seeded or fertilized	990	1,500	10,225
Natural, unimproved	11,924	10,749	0
Total permanent pasture	13,724	13,749	12,625
tal agricultural land	16,000	16,000	16,000

1/ 1974 projections are from the Agricultural Development Plan, 1965-74, d show plan technicians' projections of land use with and without adoption agrarian reform measures recommended in the plan.
2/ Potential land use is estimated, assuming that soils are managed so as protect them from erosion and improve their natural fertility, and assuming l agrarian reform programs are implemented.
3/ Obtained by deduction.
4/ Excluding natural woods and forests.

main nearly two-thirds of the total agricultural land in permanent pastures at should not be plowed. All could be improved, however, by upgrading tural growth through seeding, fertilization, and controlled grazing.

Size and tenure of farms--A small number of large estancias and a large mber of small farms characterize Uruguay's farmholdings. According to the 961 agricultural census, 4.4 percent of the farms of 1 hectare or over had ,000 hectares or more each and comprised some 56.9 percent of all land in arms. At the other extreme, almost 30 percent of the counted farms had 10 ectares or less and comprised only 0.7 percent of the total farm area table 3).

Landownership is more highly concentrated than farm sizes would suggest. any landowners possess two or more estancias, which may be operated separately r subdivided for renting as farm units or parts of farm units. Increasing umbers of landowners have been incorporating their properties, largely into ersonal or family agricultural societies (Sociedades Agropecuarias de apital), to benefit from the tax exemptions and privileges granted such ocieties and to prevent the breakup of landholdings through inheritance. gricultural societies controlled almost 10 percent of the farmland in 1963.

Table 3.--Number and area of farms, by size groups, Uruguay, 1961

Size group (hectares)	Number		Area	
	Total	Percentage of total	Total	Percentage of total
	Thousands	Percent	1,000 hectares	Percent
1-10	25.8	29.7	123	0.7
10-20	14.0	16.1	197	1.2
20-50	15.7	18.1	495	2.9
50-100	9.5	10.9	674	4.0
100-200	7.4	8.5	1,042	6.1
200-500	7.0	8.0	2,174	12.8
500-1,000	3.7	4.3	2,609	15.4
1,000-2,500	2.6	3.0	3,994	23.5
2,500 and over	1.2	1.4	5,680	33.4
Total	86.9	100.0	16,988	100.0

Source: (14).

The 1961 agricultural census does not reveal exactly how much farmland is owner-operated, either directly or through a hired manager, and how much is leased. Many of the larger landowners do not live on their farms, preferring to live in the city and hire a manager to operate their holdings or preferring to lease the land to tenants. Land is commonly leased for a fixed ren that is payable in cash or in kind; but a substantial number of farms are worked by share tenants, squatters, or other persons who use the land free of rent. Many of the large estates and very small farms consist in whole or in part of leased land. The intermediate size farms, however, have the highest share of their farmland leased or mainly leased. These farms also have most of the country's total area in crops for harvest, as shown in the following tabulation:

Size group (hectares)	Share of leased farms 1/ in specified size group	Share of crop area held by all farms in specified size group
	Percent	Percent
1-20	43	11
20-50	49	12
50-100	51	12
100-200	54	14
200-500	52	19
500-1,000	49	12
1,000-2,500	43	11
2,500 and over.	32	9
Total	42	100

1/ Or mainly leased farms.

s correlation between tenancy and crop raising is strongest in the mixed
pping and ranching region northeast of Montevideo.

The Agricultural Development Plan, 1965-74, lists the high level of
ancy and the uneconomic size of farm units as major obstacles to agri-
tural development. Extremely small farms generally mean overcultivation
the land and severe damage to soils, underemployment of the labor force,
resulting low levels of productivity and income. The operators of such
rms are thus unable to afford technical improvements. Extremely large
rms, on the other hand, generally mean underutilization of land, little use
labor, and low investment per hectare. The large holdings provide suffi-
ent income so that the owner-operators have no incentive to make technical
provements. The plan authorities have examined farm size and tenure by
gions in relation to production potential, availability of markets, and
ansportation facilities. They have estimated that almost 84 percent of all
rms, accounting for 82 percent of the total farmland, have problems of size,
nure, or both (table 4).

Land reform--Many plans have been proposed in Uruguay to make land
vailable to the landless, but until recently they have seldom produced
esults. Most land is privately owned (the state owns little land), and
arge landowners have been able to block attempts to break up estates for
istribution to the workers of the land. In 1948, a land reform law authorized
he acquisition of land for colonization through direct purchase or expropria-
ions. The law established a National Institute of Colonization (Instituto
acional de Colonización) to carry out its provisions. But in 1967, colonized
and still represented less than 2 percent of total farmland.

Legislation to protect farm tenants has been somewhat inadequate. A
954 law fixes the minimum contract period for tenancy at 5 years and gives
enants the right to a 3-year renewal. At the end of the 5-year period,
owever, the owner can decide to take over the holding and cultivate it himself
r let it out to his close relatives. In reality, this provision limits the
ontract to a 5-year period. One-year extensions have prevented tenants from
eing evicted, but have not provided sufficient security of tenure to induce
enants to modernize their operations.

The Agricultural Development Plan, 1965-74, proposes an agrarian reform
rogram that includes land redistribution, better tenancy conditions, and
mprovement of farm credit and extension and other agricultural institutions.
he land reform measures include expropriation and redistribution of land to
xisting farm operators rather than to new ones; new taxation policies to
romote the voluntary sale of some estate lands to new operators; and revision
f tenancy legislation to prohibit tenancy except on a fixed-rent basis. This
ew tenancy legislation would lengthen the contract period from 5 to 8 years
nd the renewal period from 3 to 6 years, and would require that tenants
receive adequate compensation for any improvements they might make.

The aim of the plan authorities is to provide farmers with economic-
sized units, large as well as small. The proposal would thus affect some
three-fourths of the area in farms with size and/or tenure problems, but
little more than half of that area's farm operators. Land is not available,
however, according to the authorities, to increase all existing small farms

Table 4.--Number and area of farms with size and tenure problems, Uruguay 1/

Type of problem	Number		Area		Average size
	Total	Percentage of total	Total	Percentage of total	
	Thousands	Percent	1,000 hectares	Percent	Hectares
Size only:					
Too small, all owned	27.7	32.1	881	5.2	32
Too large, all owned	1.2	1.4	3,633	21.5	3,028
Tenure only:					
All rented 2/	13.8	16.0	2,897	17.2	210
Part rented 3/	3.8	4.4	1,639	9.7	431
Size and tenure:					
Too small--					
All rented 2/	21.3	24.7	824	4.9	39
Part rented 3/	2.9	3.4	252	1.5	87
Too large--					
All rented 2/	0.7	0.8	1,731	10.2	2,473
Part rented 3/	0.6	0.7	2,035	12.0	3,392
Total with size and tenure problems	72.1	83.5	13,892	82.2	193
No size or tenure problems 4/	14.2	16.5	3,000	17.8	211
Grand total	86.3	100.0	16,892	100.0	196

1/ Though based on the 1961 agricultural census, data apparently do not refe to 1961, since not only the total area in farms but also its breakdown by land use differ somewhat from data in table 1, as well as from published census returns, which appear in table 3.

2/ By farmers working the land under some form of tenure other than ownershi

3/ By farmers owning some of the land they work.

4/ Farms neither too large nor too small, and owned entirely by their operator.

Source (15).

to economically viable units. Farmers on small holdings not covered by the land reform proposals would be expected to go into nonagricultural jobs that the Government hopes would be created in the process of the country's overall economic development.

Although the agrarian reform program was submitted to the legislature in 1964, only parts of it have been enacted into law and implemented. Legislation which was passed in late 1968, and which may encourage voluntary sale of estate lands, provides for taxes based on potential land productivity to replace export retention taxes on wool and eventually on other livestock products (see section on Trade Policies). In early 1968, the Uruguayan Government

gned a P.L. 480 sales agreement that called for passage of tenancy legisla-
on and certain self-help measures. Such legislation was under consideration
late 1969.

rm Practices

Most Uruguayan farmers practice an extractive type of agriculture,
awing on the natural fertility of the soil rather than replenishing and
adually improving it through proper crop rotations and good pasture manage-
ent. Either monoculture or rotation of cash crops is the usual practice on
lmost all of the harvested land. Many farmers, however, plant some arable
and to temporary pastures of grain or other annual grasses; oats account for
ost of the area in these forage crops. Cattle may be grazed on seedling
rain when it is 3 to 6 inches high, after which the cattle are removed and
he grain is allowed to head out and ripen for harvest.

Little progress has been made in adopting improved agricultural techniques
r practicing soil and moisture conservation. Erosion is a problem, especially
n the rolling lands in the arable farming areas. Heavy rains are common and
onsiderable soil and water are lost through runoff. Yields have suffered
ecause continuous cultivation and excessive overgrazing have reduced the
roductivity of the land.

The need for soil and water conservation was officially recognized before
950, and during the 1960's the agricultural planning authorities again
mphasized the problem of erosion. Because the greater part of the eroded
and is in the zones of highest potential productivity, the Agricultural
evelopment Plan, 1965-74, gave conservation high priority among the agri-
ultural projects proposed. A Soil and Water Conservation Law was enacted in
id-1968, but funds and technicians to implement the law are still not
vailable.

Mechanization--In the early 1950's, Uruguay probably had the most highly
echanized agriculture in Latin America, with crop production estimated to be
0 percent mechanized (3). Tractor numbers nearly doubled between 1951 and
961, increasing from a little over 13,000 in 1951 to almost 25,000 in 1961
(table 5). Estimates indicate that tractor numbers on farms had increased to
32,680 by 1968. Tractor numbers per 1,000 hectares of cultivated land rose
from about 7 to 14.5 during 1951-61. This ratio is high compared with that
for Argentina, but is low compared with that for the United States. (Using
"new tractor equivalents," Uruguay would have 6.8 new tractor equivalents per
1,000 hectares of cultivated land in 1961, compared with 27.7 for the United
States.) The number of combines also increased between 1951 and 1961, though
there was apparently no increase in the number of machines for bulk handling
of grain and oilseeds, much of which still require manual handling (1).
Substantial quantities of other machinery, including trucks, trailers, and
pickups, were imported during 1951-61.

By 1967, however, reports indicated that a shortage of farm machinery
was hampering crop production. To alleviate this shortage, the U.S. Agency
for International Development (AID) granted Uruguay a dollar loan in 1968 to
be used primarily for importing harvesting and other farm machinery and for
expanding the output of wheat and flaxseed (traditional export crops), malting

Table 5.--Selected farm machinery and implements, Uruguay, 1951 and 1961

Kind	1951	1961
	Thousands	
Tractors	13.3	24.7
Plows	141.4	138.0
Disk tillers and harrows	16.2	91.6
Seed drills	9.0	11.4
Mowers	5.4	7.4
Binders, combines, and threshers	4.6	9.1
Corn shellers	25.6	24.7
Wool-shearing machines	1.8	2.5
Carts	68.9	68.2
Trailers, trucks, and pickups	8.2	20.8
Water pumps	na	17.0
Motors and electric generators	na	39.0

na = data not available.

barley, and grain sorghum. Importation of forage planting and harvesting machinery, fencing, and other grassland equipment has been facilitated since 1960 under the Plan Agropecuario. (See section on Agricultural Policies.)

Almost all farm machinery is imported; the principal supplier in most years has been the United States. Farm machinery is imported and distributed by trade organizations, many of which have local agencies throughout Uruguay to provide service and spare parts and make on-the-farm inspections.

Fertilizers--Consumption of commercial fertilizers in Uruguay rose sharply in the early 1960's above the level of the late 1950's (table 6); but even so, by 1964, farmers applied fertilizer to only 10 percent of the area in crops and 0.5 percent of the area in permanent pasture.

About two-fifths of the fertilizer applied to crops in 1964 was used for grains and oilseeds (32 percent for wheat alone); the rest was used for potatoes, sugar beets, sugarcane, truck crops, and orchards. Because pastures rather than field crops benefit from animal droppings, only small amounts of manure are applied to crops. Green manuring appears to be even more rarely practiced than rotation of cash crops with feed legumes to help restore nitrogen to the soil. The Government has encouraged fertilizer use by payment of direct subsidies and by making credit and technical assistance available. The 1960 Plan Agropecuario had a major role in stimulating use of fertilizer on pastures; as a result, use of fertilizer rose by more than 50 percent between 1962 and 1965.

Under the Agricultural Development Plan, 1965-74, grains, oilseeds, fruits, and vegetables, as well as pastures, are to receive sharply increasing applications of fertilizer, with the rate of increase somewhat less for crops than for pasture. The projected demand for 1974 indicates that 45 percent of

able 6.--Commercial fertilizer consumption in Uruguay, averages 1956-65, annual 1966-68 1/

Period or year	Plant nutrient content			
	Nitrogen	Phosphoric acid	Potassium	Total
	1,000 tons			
verage:				
1956-60	2.2	8.0	2.1	12.4
1961-65	7.8	23.5	4.4	35.7
966	8.3	21.4	4.6	34.3
967	7.4	20.6	5.5	33.5
968	10.0	23.0	7.0	40.0

1/ Data for years ending June 1966, 1967, and 1968 are from the United Nations Food and Agriculture Organization. They are not fully comparable with data for earlier years, which are from The Honorary Livestock Commission (15).

the total fertilizer used will be applied to pastures, compared with 33 percent in 1963. This gain will be in phosphate fertilizers alone. Research during the early 1960's proved that phosphate fertilizers are the key to pasture improvement; the high-quality legumes needed to supply the soil with nitrogen at low cost require added phosphate to do well in Uruguay.

Uruguay imports more than 95 percent of its fertilizer. Part of the imports are in the form of raw materials for the domestic fertilizer industry, which makes single superphosphate, grinds phosphate rock and basic slag, prepares fertilizer from bones, and compounds complete fertilizers. Bones are the only raw material obtained from domestic sources. Uruguayan output of phosphate fertilizer doubled between 1962 and 1966, but it accounted for less than one-third of the country's phosphate fertilizer consumption during that period. Projects for expanding domestic output include construction of a concentrated superphosphate plant.

Irrigation and watering points--The irrigated area of Uruguay increased by nearly two-thirds between 1951 and 1961 and by more than two-thirds from 1961 to 1968, but still represented only a small percentage of the seeded area. Rice and sugarcane, both grown largely under irrigation, account for most of the crops grown on irrigated land (table 7).

Principal sources of irrigation water are the Uruguay River and the Laguna Merín. Gravity irrigation is practically nonexistent; because of the lay of the land, water must be mechanically lifted to the fields. Livestock get water mainly by drinking directly from rivers, streams, and lakes; but artificial ponds and watering places supplied from wells pumped by motors or windmills are also important (fig. 2). By 1961, however, more than a third of all paddocks on farms had no permanent supply of water for livestock.

Table 7.--Seeded and irrigated area in selected crops, Uruguay, 1961, and estimated area irrigated, 1968

Crop	1961			Estimated area irrigated, 1968
	Area		Percentage of seeded area irrigated 1/	
	Seeded	Irrigated		
	1,000 hectares	1,000 hectares	Percent	1,000 hectares
Rice	17.8	17.5	98	35.0
Sugarcane	4.8	4.3	91	4.7
Truck crops	62.0	2.5	4	2.7
Tree fruits	31.3	1.4	5	1.5
Grapes	18.3	0.1	1	2/
Forage crops	619.9	0.5	3/	2/
Other crops	602.2	0.3	3/	0.9
Total	1,356.3	26.6	2	44.8

1/ Based on unrounded data.
2/ Included in other crops.
3/ Less than 0.5 percent.

Most irrigation works, as well as watering points, have been developed by private enterprise. The Government, however, has asked joint help from FAO and the Inter-American Development Bank in developing a program for large-scale construction of needed watering points. Uruguay is cooperating with Brazil and the U.N. Special Fund in preinvestment surveys for development of the Laguna Merín basin. Development would involve both irrigation and drainage in large-scale reclamation efforts for production of crops, particularly rice.

Improved seed--Use of improved seed in Uruguay was very limited until the 1960's, when various agricultural programs were instituted to encourage such use. During the early part of the decade, an efficient seed certification system was organized with FAO assistance. The 1960 Plan Agropecuario not only provided some seed but also advanced information on the varieties and strains of legumes and grasses that are specially adaptable to different parts of the country. The Plan also demonstrated that seed inoculation with rhizobia is essential to the successful establishment of legumes in Uruguay. The Honorary Livestock Commission improved inoculation techniques, made suitable materials available to farmers, and promoted the domestic manufacture of the inoculum. Government payments to lower the market price of improved seed also encouraged its use, as did the agreement by the Bank of the Republic to limit credit for seed wheat to seed that had been certified.

Under the Agricultural Development Plan, 1965-74, the use of good-quality seed is scheduled to spread to the main field crops and permanent pastures. Goals for 1974 call for certified seed output to cover a proportion

Figure 2.--Windmill furnishes the power to pump water from a well at this watering place for livestock.

of the demand for seed that ranges from 15 percent for rice and 20 percent for wheat and brewing barley, to as much as 85 percent for red and white clover.

Legislation passed in June 1968 requires that breeder, foundation, and registered seed be produced by Government experiment stations, and that the certified seed multiplied from registered seed be produced by selected farmers who are members of cooperatives under state control. Such certified seed is now grown by members of three cooperatives, all under the control of the experiment station for crops. This experiment station grows the breeder and foundation seed and has technicians who supervise the production and certify the seed for growers (1). The legislation also provides for regulating the sale of noncertified seed to ensure that it meets minimum standards for purity and germination; however, this regulation should result in little if any change from present practice. By 1967, the area sown with certified seed accounted for almost 15 percent of the total area in wheat and nearly 40 percent of the area in sunflowers.

Plant and livestock pest control--Diseases and insects, birds, and other pests cause much damage to crops in Uruguay. Losses can be high in years when conditions are favorable for some plague. For example, in 1940 stripe rust destroyed 50 percent of the wheat, and in 1961 rusts and septoria blight

together destroyed 30 to 40 percent. Annual losses from pests (other than disease) are estimated at 15 to 20 percent of the value of crop production. Livestock diseases and parasites are estimated to reduce the potential value of livestock output by one-third annually. Aftosa (foot-and-mouth disease), brucellosis, cattle ticks and tick fever, swine fever, and sheep scab exist almost everywhere.

The Government has made some effort to control both plant and animal pests, but has had more success with plant pests. Locust invasions led Uruguay and eight other Latin American countries to sign in 1934 the Inter-American Convention for the Fight against Locusts, and to establish in 1946 the Permanent Inter-American Anti-Locust Committee. This committee publishes annual reports on the locust situation in the countries concerned. Fortunately Uruguay has been free from locusts for a number of years. During the 1960's, all parts of Uruguay were declared to be in a state of emergency for action against armyworms. A warning service that provides guidance as to when and what kind of pesticides should be used was established to alert citrus and other fruit growers about citrus pests.

Pesticide use is estimated to have tripled in volume from 1955 to 1961, leveling off thereafter. Of the total amount used in 1963, fungicides represented 54.3 percent, insecticides 33.4 percent, weedkillers 11.4, and chemicals for treating seed 0.9 percent. Fungicides are used mostly on vineyards, but also on some tree fruits, potatoes, and truck crops. Weed-killers, on the other hand, are used on field crops. In 1963, weedkillers were used on 54 percent of the wheat planted, 25 percent of the flaxseed, and 100 percent of the sugarcane. Insecticides are applied in both fields and orchards.

Legislation to establish control measures for aftosa dates back to 1961. It required that all centers of infection be reported and that all animals for market be vaccinated against the disease. Under an agreement with the United Kingdom in 1968, Uruguay, Argentina, Brazil, and Chile undertook not only to make aftosa a notifiable disease, but also to ban the movement of stock from any infected farm and to export only carcasses of animals that had been vaccinated against the disease.

Cattle tick eradication may be successful with measures already at hand. By 1950, strict dipping of cattle proved successful in clearing the area south of the Río Negro. A countrywide tick eradication effort, the last stage of which began in October 1968, is in progress whereby Government agents are authorized to go to farms and ranches and dip the stock. Drenching stock for internal parasites as well as dipping for external parasites (fig. 3) began to spread in Uruguay in the mid-1950's. More frequent drenching is needed in Uruguay, where sheep and cattle are pastured together, than in countries where sheep follow cattle on pastures. Where livestock are rotated, many internal parasites are destroyed, since some types seem able to adapt themselves only to one or the other host. Because poor feeding lowers resistance to both parasites and disease, the pasture improvement program mentioned earlier is likely to advance pest control. It should result in better and more balanced feed that should, in turn, produce animals better able to combat disease and parasites.

Figure 3.--On one of Uruguay's large ranches, sheep are being dipped to control external parasites.

The Agricultural Development Plan, 1965-74, calls for sharply stepped-up assaults on both plant and animal pests. Under the plan, fungicides, insecticides, herbicides, and chemicals for treating seed will be used more frequently than before. The plan calls upon the Government to take large-scale action, as it did in the campaign against the armyworm, to combat a number of serious pests, including scarab beetles, greenbugs, weeds considered to be plagues, and some birds such as doves and parakeets. The plant protection program also provides for intensified research on pests and their control, and for extension services to assist growers in the adoption of pest control measures.

Provision for improved animal health under the Agricultural Development Plan, 1965-74, emphasizes research and extension work also, as well as campaigns against contagious diseases and parasites, reequipment of the official diagnostic and control laboratory, organization of mobile units, and the establishment of a quarantine station to observe imported animals.

LIVESTOCK AND PRODUCTS

Uruguayan farming revolves around the production of cattle for meat and milk, and sheep for wool. Pastures cover most of the agricultural land. In 1962-64, livestock products accounted for more than two-thirds of the value of agricultural output and nearly nine-tenths of the value of agricultural exports. Wool is produced mostly, and beef partly, for export. Growth of export trade has been hampered by increasingly heavy taxes on exports of

Table 8.--Livestock numbers in Uruguay, by principal kinds, 1951, 1956, 1961, 1966, and 1967

Year	Cattle	Sheep	Hogs
		Thousands	
1951	8,154	23,150	259
1956	7,433	23,303	381
1961 1/	8,792	21,738	383
1966	8,400	21,800	380
1967	8,300	21,400	375

1/ Census returns for 1961 also show about 10,500 goats, 4,700 donkeys and mules, 478,000 horses, and 15,500 rabbits, as well as nearly 5 million head of poultry (excluding ducks and geese).

Sources: (4) for 1951, 1956, and 1961; (14) for 1966-67.

livestock products. Since the early 1950's, these taxes have impaired the competitive position of Uruguayan products abroad, while also depressing prices received by stockmen.

Numbers, Breeds, and Distribution of Livestock

Although total livestock numbers have changed little over the past 50 years, hog numbers rose to record levels in the 1960's. Although there is no marked trend for either cattle or sheep, 1967 cattle numbers appear to be up slightly and sheep numbers down slightly from the 1951 level (table 8).

Most of the cattle are beef breeds. The Hereford (fig. 4) predominates, accounting for more than half of all cattle in 1951, the latest year for which data are available. Shorthorn and Aberdeen Angus are also important beef breeds. In 1951, dairy breeds, principally the Holande (Holstein-Friesian), made up only 7 percent of all cattle. Crossbreeds are numerous and include crosses with the wild cattle of colonial days, all descended from the long-horned Spanish stock introduced in the early 17th century. This so-called native or criollo breed disappeared as such from commercial herds in the early 1870's. The opening of the export market in England gave impetus to the breeding of blooded stock and the upgrading of herds in Uruguay. Imports of the best animals available over the years have resulted in good foundation stock. Cattle are evenly distributed throughout the country (fig. 5), but the dairy breeds are heavily concentrated in the south.

Sheep outnumber cattle by about three to one, but are kept on far fewer farms than cattle. Sheep are not raised on small farms in the extreme west and southwest; elsewhere, however, they are widely distributed (fig. 6). Sheep breeds have shifted over the years from a predominance of Lincoln, Merino, and Romney Marsh to the Corriedale, in line with the continuing trend toward breeds that produce good meat as well as wool. The quality of the

Figure 4.--Hereford is the principal beef cattle breed in Uruguay.

stock is generally well-maintained on the larger ranches, but almost no attention has been paid on the smaller farms to culling out inferior animals.

Some hogs are found in every departamento of Uruguay, but the 10 southernmost had two-thirds of the sows and three-fourths of the young pigs counted in 1961 census returns. Breeds introduced since the midforties include the Landrace, but the relative importance of this breed is unknown. Hogs are raised for the domestic market, but consumption of pork is limited by the relatively high price of pork, which, in turn, reflects the scarcity and high price of feed grains.

Uruguay's poultry flock consists mostly of chickens but includes some turkeys, ducks, and geese. A large share of the chickens are of unknown breeds or are crosses. During the 1950's and 1960's, commercial producers imported stock from many countries, particularly Denmark, and breeds important before then (Rhode Island Reds, Leghorns, and Plymouth Rocks, together accounting for about one-fifth of the total) may have decreased in their share of total chicken numbers. About four-fifths of all farms keep some poultry, but less than half of these raise chickens on a commercial basis.

Horses were brought into Uruguay about the same time as cattle and sheep. The native or criollo breed was first crossed with northern European breeds

URUGUAY: NUMBER OF CATTLE, 1961

Figure 5

URUGUAY: NUMBER OF SHEEP, 1961

Figure 6

Figure 7.--Gauchos still use horses to round up cattle in Uruguay.

in the mid-1850's, but criollo horses still predominate. Horses continue to be used for handling livestock (fig. 7), but draft horses are steadily being replaced by machines.

Livestock and Pasture Management

Although stockmen became interested in upgrading their animals in the 19th century, many stockmen today continue to neglect feeding, care, and management of their animals. Since supplemental feeding of beef cattle and sheep is rare, the animals are usually ill-fed during part of the year. As a rule, farm animals are poorly sheltered, and each year many lambs and weaker sheep die only because they cannot survive in winter with no dry place to lie and not enough feed to eat. Insufficient feed and poor shelter lower resistance to disease and parasites and thus contribute to reduced fertility. Lack of both proper handling yards and shearing sheds results in unnecessarily rough treatment of stock and is another cause of animal loss in Uruguay. Because the routine practice of caring for the feet of sheep is neglected, sheep often find it so painful to walk that they do not feed properly. On some of the larger ranches, however, sheep do receive excellent shelter (fig. 8) and are treated for wounds or other sores caused by disease or insects (fig. 9).

Figure 8.--Sheep are properly housed on this large ranch in Uruguay.

Shearing methods in Uruguay are usually outmoded. Shearers do not take the fleece off in one piece, as is the more skillful practice, but remove it in several pieces. The quality of the wool is reduced because each fleece must be separately assembled, rolled, and tied before baling.

On most farms, chickens live under primitive conditions, sleeping in trees, barns, and places built for other uses. They are thus exposed to the abrupt changes in temperature that occur frequently.

Nearly all of the permanent pasture in Uruguay consists of unimproved natural grasslands that have suffered from overgrazing since the estancias were enclosed by boundary fences in the last quarter of the 19th century. Livestock producers began stocking their holdings with so many animals that pastures were closely grazed throughout the year (1). Stubble fields, which are used for temporary pasture, are not planted to grass but are left to self-seeded vegetation. At best, this growth can be considered no more than equal in forage value to natural pasture; at worst, it is said to be practically worthless (6).

Continued pasturing of cattle and sheep on the same land has led to severe shortages of feed, not only during prolonged droughts but also during periods of the dry season in summer and cold weather in winter, when grass

Figure 9.--Sheep on this modern ranch receive excellent care, and wounds and insect damage are tended promptly.

growth usually declines. Cattle suffer more than sheep when both are pastured together, since sheep keep the grass so short that cattle can get little to eat. By the late 1940's, seasonal shortages of livestock feed had spread to nearly all ranches and farms in Uruguay, damaging both livestock and natural grasslands.

The need for better pasture management was emphasized in the 1951 report of the joint World Bank/FAO agricultural mission (7) (see section on Agricultural Policies). The Plan Agropecuario, finally adopted in 1960 as a result of this report and financed by a World Bank loan, originally provided for some 600 medium-sized ranches that would serve as demonstration points from which knowledge and experience in modern pasture production would spread throughout the farming community. The number was first increased to 1,000 and then again to more than 1,400 in 1964.

Ranchers participating in the demonstration program are expected to follow the recommendations of the plan. The plan suggests that each ranch be subdivided into some 12 to 15 fenced and watered paddocks; that a fodder reserve be established for feeding animals in seasons of slow grass growth; and that an agreed-upon percentage of the ranch's pasture be improved by application of fertilizers and planting of better grasses. These ranchers receive loans to help finance the improvements and technical assistance and supervision from qualified technicians in implementing them. The Honorary Livestock Commission (Comisión Honoraria del Plan Agropecuario), set up in 1958, has technical responsibility for the plan.

The Commission and its experts, including advisers from New Zealand and Australia, have tried different methods of pasture improvement and have had unusual success thus far. In addition to the conventional and costly plowing of pastures before seeding and fertilizing, the Commission has tried sod seeding and oversowing. In sod seeding, legumes and fertilizer are implanted in the existing grass cover by means of a special machine. In oversowing, pellets of seeds and fertilizer are dropped on the ground, either by top-dressing equipment or from airplanes. By 1964, the Commission had determined which method should be used in the different parts of the country. It had also accumulated information about the legumes and grasses best suited to Uruguayan conditions. Improvement in actual pastures during 1960-64 was as follows:

	1,000 hectares
Permanent pasture improved by:	
Conventional method	81.3
Sod seeding	41.5
Oversowing	26.1
Total permanent pasture	1/ 148.9
Annual pasture	7.7
Refertilized pasture	84.5

1/ Book total 148.6. Excludes 70,000 hectares of improved permanent pasture on nonsupervised ranches.

As a result of widespread demand for extension of the Plan Agropecuario's pasture improvement program, the Government requested and obtained an additional loan from the World Bank in 1965. The loan was sufficient to include an additional 2,600 medium-sized ranches in the plan's supervised credit program, which provides loans for improvement and rehabilitation of pastureland (see section on Farm Credit). The loan also provided financing for the importation of "production essentials" for about 1,000 larger ranches whose operators could draw up development plans with the aid of the Honorary Livestock Commission but would arrange their own financing. "Production essentials" include livestock, seeds, fertilizer, subdivisional fencing, corrals, dips, and machinery for pasture establishment. By 1970, these 3,600 ranchers are expected to have started improving about 400,000 hectares of pasture (270,000 for supervised and 130,000 for nonsupervised ranchers).

The plan has interested landowners in the direct management of their land. They have found that full exploitation of new pasture-management opportunities requires a great deal of day-to-day, on-the-spot supervision and risky decisions that can be handled only by the owners themselves or by highly qualified managers. This realization reportedly has even led a number of participating ranchers to live on their properties or spend much more time on them than formerly, to take personal charge of the ranch development program (6). On the other hand, many landowners refused to take advantage of the new techniques, and led the Honorary Livestock Commission to advocate fiscal measures that would penalize underutilization of grazing lands.

The results of the plan indicate that the rewards of pasture improvement re substantial: participating ranchers have found that improved pastures an carry three to five times as many animals as unimproved pasture, and that he animals mature faster and produce more meat and wool per animal. It is lready evident that pasture improvement is feasible and can be profitable in ll parts of Uruguay. The Agricultural Development Plan, 1965-74, projects urther expansion of pasture improvement, and sets the goal for improved astures (artificial or seeded, fertilized or not) at 13 percent of total ermanent pastures without agarian reform, and at 22 percent with agrarian eform (see section on Land Use and Types of Farms). Even at 13 percent, mproved pastures would be nearly three times as large as the area to be mproved by 1970 under the Plan Agropecuario.

The Agricultural Development Plan, 1965-74, also emphasizes improvements in the care of sheep, shearing practices, and marketing facilities.

Most of the large farms or ranches have stock pens and other facilities for auction sales of livestock for breeding and slaughter. Large numbers of animals are sold at these farm auctions or direct to packinghouses, but many of them are shipped to Montevideo for auction at the terminal market. A good road and rail network covers most of the livestock-producing areas; but in some places, unpaved roads become impassable after heavy rains. Many animals are still moved by rail, but truck transportation has been gaining in importance.

Livestock Products

Wool and beef are the principal products of Uruguay, and wool is by far the most important foreign exchange earner. Raw wool alone accounted for 30 percent of the value of the country's exports in 1963-66, and together with wool tops, it accounted for 45 percent of the total. Uruguay also contributes an appreciable share of world wool exports. It ranks as the fifth world exporter, following Australia, New Zealand, Argentina, and South Africa. Wool production in Uruguay fluctuates from year to year (table 9), depending largely on weather conditions. Shearing takes place in October-December. Most Uruguayan wool grades from 50's to 58/60's; 5 to 6 percent is of finer counts and about 5 percent is of lower counts. No carpet wool is produced.

The failure of wool output to expand may be due in large part to Government exchange rate and export tax policies. Speculation over expected changes in both the exchange rate and export taxes has been responsible for delayed marketing of wool.

The legislation passed in late 1968, gradually replacing the wool export tax by a tax on land productivity, should increase returns to efficient producers and stimulate modernization of the wool-growing business.

The United Kingdom ranks first among the major markets for greasy wool from Uruguay, followed at a distance by the European Common Market and the United States. The Common Market takes most of Uruguay's exports of scoured wool and tops.

Table 9.--Production and exports of wool, Uruguay, averages 1956-64, annual 1965-68 1/

Period or year	Production 2/	Exports			Available for domestic consumption 4/
		Raw	Tops 3/	Total	
	1,000 tons, greasy basis				
Average:					
1956-58	86	56	22	78	8
1959-61	83	58	21	79	4
1962-64	83	40	24	64	19
1965	76	60	19	5/ 79	5/
1966	88	42	25	67	21
1967	80	45	25	70	10
1968 6/	75	57	26	5/ 83	5/

1/ Estimates are mainly from Agricultural Development Plan, 1965-74, publications, which differ somewhat from estimates published by the United Nations Food and Agriculture Organization and by the U.S. Department of Agriculture.
2/ Wool year ending September of year shown.
3/ Including noils and waste.
4/ Includes wool for the manufacture of textiles for export. No adjustment has been made for changes in stocks.
5/ Exports, domestic consumption, or both drawn in part from stocks.
6/ Preliminary.

Source: (15).

Beef, including veal, accounts for about four-fifths of the red meat produced in Uruguay (table 10). Pork accounts for about 6 percent, and mutton and lamb make up most of the rest. Beef is also far in the lead among the red meats consumed and exported. Both consumption and exports have been influenced by Government policy regarding export taxes, prices, and slaughter and sales regulations. Despite restrictions on cattle slaughter for domestic consumption, exports of beef showed a steady drop from 1964 to 1967. Higher liveweight prices for cattle and lower carcass beef prices discouraged packers from slaughtering for export. With domestic sales curtailed, slaughtering of cattle and calves in 1966 and 1967 dropped to the lowest level since 1959. Scarcity of beef supplies in local markets increased the demand for mutton and pork, resulting in heavy slaughter of both sheep and hogs in 1967.

Total meat exports recovered somewhat in 1968 and early 1969, but developments during the remainder of 1969 created a chaotic situation in both the meat export and domestic markets. Traditionally, the United Kingdom and West Germany have been the major outlets for Uruguay's exports of frozen and chilled meat, and East European countries have taken substantial quantities since the mid-1950's. Effective June 15, 1969, however, the United Kingdom banned imports of Uruguayan meat because the meat-inspection service did not

Table 10.--Production and exports of red meat, Uruguay, averages 1951-65, annual 1961-67

Period or year	Beef and veal		Mutton and lamb		Pork		Total		
	Production	Exports 1/	Production	Exports 1/	Production	Exports 1/	Production	Exports 1/	Available for domestic consumption 2/
	1,000 tons, carcass weight								
Average:									
1951-55	295	56	60	6	20	3/	375	62	313
1956-60	261	58	51	3	20	3/	333	61	272
1961-65	313	98	51	5	24	0	389	103	286
1961	264	62	46	3/	24	0	333	62	271
1962	272	83	45	0	25	0	342	83	258
1963	321	97	46	1	25	0	392	98	294
1964	369	150	49	3	25	0	443	153	290
1965	341	97	71	18	22	0	434	115	319
1966	261	69	56	8	23	3/	340	77	263
1967	241	55	82	6	25	3/	348	61	287

1/ Includes carcass-weight equivalent of fresh, chilled, frozen, and prepared red meat. Excludes offals, fats, and live animals. There are no recorded imports.

2/ No adjustment has been made for changes in stocks.

3/ Less than 500 tons.

Source: Mainly U.S. Department of Agriculture publications.

meet U.K. standards. Furthermore, a second British measure, effective October 1, 1969, prohibits imports into the United Kingdom of all beef-with-bone from countries where aftosa is endemic. Uruguay currently does not have equipment to bone its beef for export. Uruguay is hiring additional meat inspectors, but the service does not yet meet standards set by the United Kingdom. The packing plants are contemplating the purchase of new equipment to modernize their operations, but funds are low and machinery for boning is not yet available. The loss of the U.K. market is being partly offset by increased shipments to Italy. Although the United States is the largest export market for Uruguay's cooked beef, it does not admit chilled or frozen meat from Uruguay because of the prevalence of aftosa.

Another difficulty during 1969 was the 4-month strike affecting workers in much of the packing industry. This strike disrupted the domestic market for meat as well as export sales. Until recently, the only large slaughter-house serving the domestic market was the Government-owned National Slaughter-house (Frigorífico Nacional), known as Frigonal. Established in 1928 in Montevideo, Frigonal was forced to sell meat at low, Government-fixed prices and to support an unduly large staff, said to be chosen and maintained through political patronage. As a result, Frigonal operated at a financial loss, and, for this reason, was closed intermittently during 1968 and 1969. The plant was also closed during the strike, and independent packers supplied Montevideo with meat during that period.

Beef consumed in other towns and rural areas comes mainly from municipal slaughterhouses. Slaughter of cattle on farms is restricted by the warm climate prevailing most of the year; the beef is eaten at once or preserved by drying it in the open. Though mutton is consumed on sheep-raising farms, beef is preferred by people living in the countryside, as in the cities.

Commercial production of milk in Uruguay averaged 698 million liters annually in 1963-67. According to the 1961 agricultural census, commercial output accounted for more than two-thirds of the milk produced. Commercial production is estimated by the Milk Producers' Cooperative (Cooperativa Nacional de Producción de Leche, known as Conaprele), a Government agency established in 1935. It has the exclusive right to provide milk for Montevideo, and more than a fifth of the nearly 10,000 commercial dairy farms send their milk to the cooperative to supply the fluid milk sold there. Prices are fixed at farm, wholesale, and retail levels. Members of the cooperative have a daily sales quota for which they receive the fixed price. Milk sent in excess of the quota and used mostly for manufacture brings lower prices. Fluid milk sold in the capital has long been pasteurized.

Some milk plants in the interior also buy from producers on a quota basis; others buy on the basis of quality and butterfat content. Producers may sell raw milk to retailers for direct distribution to consumers, as well as to milk plants for pasteurization. Producers also make a substantial part of their milk into butter and cheese. Estimates for commercial output in 1967 of 2,100 tons of butter, 3,200 tons of cheese, and 1,120 tons of casein show a drop from 1965 of some 16 percent for butter and cheese and 37 percent for casein. During the mid-1960's, casein ranked first among dairy product exports and dried milk ranked first among such imports. The United States

ought most of the casein and gave Uruguay most of the dried milk through haritable organizations, under P.L. 480.

Hides, skins, and tallow are the most important byproducts of the ivestock industry. Production of tallow, used largely in the domestic soap nd shortening industries, averaged about 24,000 tons annually in 1962-66. Hides and skins are important export items. Output depends on the commercial slaughter of animals. Annual average production in 1962-66 included almost 1.5 million cattle hides and calf skins and 3.1 million sheep and lamb skins. The principal export outlet shifted from the United Kingdom in the early 1950's to the European Common Market in the mid-1960's.

Output of both eggs and poultry has increased substantially since 1950. Production in 1963 totaled 358 million eggs (about 16,000 tons) and nearly 5,500 tons of poultry meat. Foreign trade in eggs has been erratic. Imports were necessary in the 1950's. Exports shot up to more than 2,000 tons in 1965, but dropped in 1966 and 1967, and the 1965-67 average was 1,300 tons. Poultry was exported in 1964, with shipments of 360 tons, but these exports also declined, averaging 115 tons in 1965-67.

MAJOR CROPS

Except for grass, the major crops produced in Uruguay are grains and oilseeds; they are also the leading export crops. The country produces much or most of its supply of sugar, fruits, and vegetables, but imports the bulk of its cotton and tobacco.

Grains

Wheat--Uruguay's major staple food grain, wheat, leads among harvested crops in area sown. It became an important export crop in the 1950's. Exports dropped off in the 1960's and imports were needed in 1964 and 1968, when production was unusually low (table 11). Argentina was the principal supplier in 1964, and the United States in 1968, when shipments were made under the P.L. 480 program. Brazil is usually the principal market for Uruguayan wheat in years of exportable surplus.

Output has declined primarily because former high-cost producers have abandoned wheat growing in the face of less remunerative prices maintained by the Government in the 1960's compared with previous years. Since 1963, support prices have been supplemented by a Government loan program designed to encourage the use of better production techniques. As mentioned earlier in the section on Farm Credit, loans are made by the Bank of the Republic to wheat farmers for operating expenses for such things as seed, fertilizer, pesticides, and harvesting. Improved production techniques are also emphasized in the Agricultural Development Plan, 1965-74. Authorities believe that unit yields can be raised substantially and costs lowered sufficiently to permit Uruguayan wheat to compete successfully in world markets.

Wheat is grown mostly in the south and west (fig. 10) on farms of over 100 hectares. Aside from a high degree of mechanization and the increased use of certified seed since 1964, wheat farmers have been slow in adopting

Table 11.--Wheat area, production, and net trade, Uruguay, averages 1951-65, annual 1961-69

Period or year	Area sown for grain 1/	Yield per hectare 1/	Production 1/	Net trade 2/	Available for domestic consumption 3/
	1,000 hectares	Quintals	1,000 tons		
Average:					
1951-55	623	9.8	610	-248	362
1956-60	630	8.1	513	-149	364
1961-65	448	9.5	424	-7	417
1961	523	7.9	413	4/	413
1962	436	8.5	372	4/	372
1963	400	11.3	452	-47	405
1964	354	6.7	237	+115	352
1965	527	12.3	646	-104	542
1966	527	10.4	547	-132	415
1967	380	8.7	329	-11	318
1968	222	6.5	144	+246	390
1969	5/ 520	9.0	468	na	na

na = data not available.

1/ Crop harvested beginning in November and ending in January of year shown. 2/ + = imports; - = exports. Includes flour in terms of wheat. 3/ No adjustment has been made for changes in stocks. 4/ Less than 500 tons. 5/ First official estimate.

Sources: (13) (19) and U.S. Department of Agriculture publications.

improved techniques. Few of them prepare the land adequately for sowing, which takes place in April-August. The growing crop is seldom fertilized or protected against pests other than weeds. Armyworms, greenbugs, and scarab beetles inflict heavy damage, as do doves. The major diseases affecting wheat are septorias and rusts. Harvesting takes place in November-January, almost everywhere by combine; bulk transport from the field, introduced in the mid-1960's, has begun to spread in Colonia and Soriano departamentos.

Rice--A major export crop, rice is second only to wheat as a food grain in Uruguay. Both output and exports have trended upward since 1960, as shown in the following tabulation (in thousands of tons, milled rice basis):

	Production	Exports
1959-61 average	36	10
1962-64 average	40	22
1965-67 average	68	33
1968	68	18
1969	82	na

Commercial rice production is relatively new in Uruguay. The country relied substantially upon imports for its rice until the mid-1930's, when the crop first met domestic needs. The Government then prohibited imports,

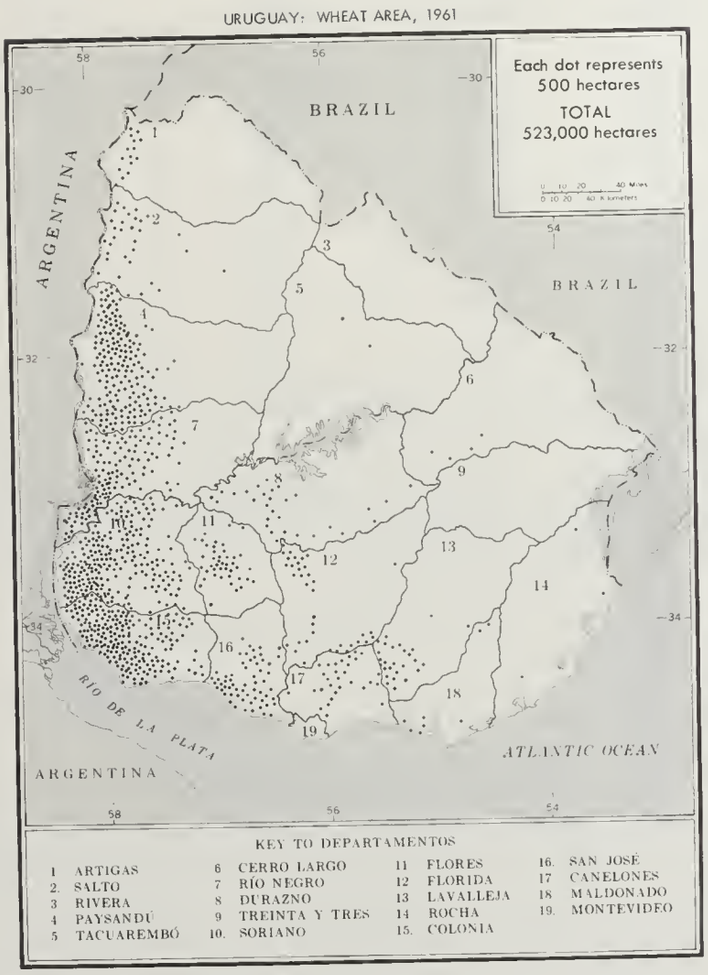
URUGUAY: WHEAT AREA, 1961
Each dot represents 500 hectares
TOTAL 523,000 hectares
BRAZIL
ARGENTINA
BRAZIL
ATLANTIC OCEAN
RIO DE LA PLATA
ARGENTINA
KEY TO DEPARTAMENTOS
1 ARTIGAS
2. SALTO
3 RIVERA
4 PAYSANDÚ
5 TACUAREMBÓ
6 CERRO LARGO
7 RÍO NEGRO
8 DURAZNO
9 TREINTA Y TRES
10. SORIANO
11 FLORES
12 FLORIDA
13 LAVALLEJA
14 ROCHA
15. COLONIA
16. SAN JOSÉ
17 CANELONES
18. MALDONADO
19. MONTEVIDEO

Figure 10

Table 12.--Corn area, production, and net trade, Uruguay, averages 1951-65, annual 1961-69

Period or year	Area sown for grain	Yield per hectare	Production	Net trade 1/	Available for domestic consumption 2/
	1,000 hectares	Quintals	1,000 tons		
Average:					
1951-55	291	6.9	201	-2	199
1956-60	316	5.5	173	+27	200
1961-65	228	6.4	147	+16	163
1961	277	7.9	220	+7	227
1962	267	5.8	155	+9	164
1963	236	8.7	206	+1	207
1964	167	5.4	91	+61	152
1965	192	3.3	63	+4	67
1966	213	8.4	180	+1	181
1967	226	5.2	117	+9	126
1968	162	4.3	69	3/ +164	233
1969	175	5.4	95	na	na

na = data not available.

1/ + = imports; - = exports. Sources available for the 1960's vary as to amounts imported and exported, but the variations are small in relation to the supply available for domestic consumption.

2/ No adjustment has been made for changes in stocks.

3/ Estimated total for year, including small quantities of cornmeal in corn equivalent.

Sources: (13) (19) and U.S. Department of Agriculture publications.

except for seed, and controlled producer prices through the 1959/60 season. Prices have since been fixed by agreement between the independent rice growers' association and the large rice mills, which own and operate large farms, extend production credit to independent growers, and buy nearly all their output. The area sown to rice, which had never exceeded 20,000 hectares before 1963, averaged 33,000 hectares in 1967-69.

Foreign markets for Uruguayan rice in the 1950's included the United Kingdom, Canada, and Belgium. Canada's demand for high-quality rice has reportedly resulted in a shift in production away from short-grain japonica varieties to the so-called medium-grain Carolina and long-grain Double Carolina types. These two latter types together represented 80 percent of production in the mid-1960's, compared with about 50 percent a decade earlier. By the mid-1960's, however, little if any Uruguayan rice was going to Canada. Major markets in one or more of the years 1963-67 included Chile, Cuba, Czechoslovakia, and Peru.

able 13.--Oats and barley, area, production, and net trade, Uruguay, averages 1951-65, annual 1966-69

Period or year	Area sown for grain 1/	Production 1/				Net trade 2/	Available for domestic consumption 3/
		Oats	Malting barley	Common barley	Total		
	1,000 hectares	1,000 tons					
Average:							
1951-55	94	41	20	10	71	+1	72
1956-60	127	40	23	8	71	+7	78
1961-65	131	65	21	13	100	4/	100
1966	158	97	17	11	125	-11	114
1967	134	72		28	100	-1	99
1968	84	33		14	47	5/ +2	49
1969	129	74		42	116	5/ -6	110

1/ Crops harvested beginning in November and ending in January of year shown.
2/ + = imports; - = exports. Data in sources available for the 1960's vary as to amounts imported and exported, but the variations are small in relation to the supply available for domestic consumption. The series shown above for 1961-69 includes the barley equivalent of exported barley malt.
3/ No adjustment has been made for changes in stocks.
4/ Less than 500 tons.
5/ Estimated.

Sources: (13) (15) (19) and U.S. Department of Agriculture publications.

Most of Uruguay's rice is grown under irrigation in the Laguna Merín basin by independent growers who rent medium-sized to large farms. Growers usually cultivate the land for 3 years and then move to new and more fertile fields. On large, owner-operated farms, rice is rotated with pasture to rebuild fertility of the soil and to eradicate weeds. Renters and owners almost never apply fertilizer, but they do practice disease and insect control. The principal insect pests include armyworms and beetles; blast and other fungus diseases are of some importance, but none is widespread. Rice is planted in November and harvested in March-July, mostly by combine.

Corn--Production of corn dropped below the 1951-60 average in most years from 1961 to 1969 (table 12), but corn remains the principal feed concentrate grown in Uruguay. Corn is grown in all departamentos of the country, but concentration is heaviest in the south. Seeding takes place in September-October and harvesting in April-June. Unit yields are low, partly because the rainfall pattern is not favorable to the growth of corn, and partly because growers generally use primitive methods in cultivating the crop. Labor is primarily by hand, seeds are of poor quality, no fertilizer is used,

Table 14.--Flaxseed, area, production, seed crushed, and trade, Uruguay, average 1961-65, annual 1961-69

Period or year 1/	Area	Production of seed	Seed crushed	Oil produced	Exports, in oil equivalent 2/
	1,000 hectares		1,000 tons		
Average:					
1961-65	133	76	58	23	20
1961	118	67	55	21	26
1962	144	96	55	20	16
1963	160	84	75	32	32
1964	132	62	39	15	10
1965	113	71	67	25	17
1966	63	38	29	10	16
1967	66	40	33	12	11
1968 3/	51	27	21	8	11
1969 3/	70	45	na	na	na

na = data not available.
1/ Data are for production years ending in February except that trade data are for calendar years.
2/ Includes linseed oil and oil equivalent of flaxseed exports. Sources available show no imports of either.
3/ Preliminary, except for 1968 area and production.

Source: (19).

and growers practice no pest control. Production of certified hybrid seed began only in 1966/67.

A small part of the corn crop is consumed as green corn or as polenta, a dish made from cornmeal flavored with cheese or tomato sauce. Many rural families serve this dish in place of bread (3). Small quantities of corn also go into the manufacture of starch, alcohol, or corn oil. Most of the crop, however, is fed to poultry, hogs, and horses--about two-thirds of it to animals on the farm where it is grown. The small 1968 crop made unusually large imports necessary. They were purchased under P.L. 480 on long-term dollar credit. Agricultural planning authorities contemplate that corn for feed will be replaced by grain sorghums, which are considered better suited to Uruguay's climate. Projections for 1974 place corn output at only 55,000 tons, compared with 149,000 for grain sorghums.

Other grains--Uruguay produces oats, barley, and a small amount of canary seed for feed. Grain sorghums increased in importance during the 1960's, with output rising from 1,000 tons in 1961 to an estimated 48,000 tons in 1969. Small amounts of rye for food and some barley for malting are also produced. All the small grains are winter crops, planted in May-August and harvested in November-January.

ble 15.--Sunflower seed, area, production, seed crushed, and trade, Uruguay, average 1961-65, annual 1961-69

Period or year 1/	Area	Production of seed	Seed crushed	Oil produced	New trade, in oil equivalent 2/
	1,000 hectares		1,000 tons		
Average: 1961-65	132	73	62	17	3/
1961	153	98	90	21	3/
1962	137	80	33	19	3/
1963	141	87	86	20	-3
1964	121	63	62	14	+1
1965	110	39	37	9	+2
1966	122	99	97	22	3/
1967	164	76	75	17	3/
1968 4/	109	49	47	11	3/
1969 4/	91	65	na	na	na

na = data not available.
1/ Data are for marketing years beginning April 1 except that trade data are or calendar years.
2/ + = imports; - = exports. Sources show no trade in sunflower seed.
3/ Believed to be insignificant, if any.
4/ Preliminary, except for 1968 area and production.

Source: (19).

Oats are planted more for forage than for harvest as grain. They rank first among annual grasses sown on arable pasture but have recently gained favor as a feed grain. Output of oats during the 1960's fluctuated at levels high above the averages for 1951-55 and 1956-60 (table 13). In most years, Uruguay imports small quantities of oats, but in 1965, 1966, and 1969 the country became a net exporter of oats. Neither malting nor common barley has shown any marked trend in production.

Oilseeds--Flaxseed and sunflower seed follow grains in importance among crops cultivated in Uruguay. Peanuts are grown also, but in small quantity. Flaxseed is important in the country's export trade. Exports are chiefly in the form of linseed oil for industrial use, plus cake and meal for livestock feed. Sunflower seed and peanuts are grown almost entirely for the domestic edible-oil market, though a substantial part of the residues from pressing for oil are exported as cake and meal. Oil output from these seeds is usually supplemented by small quantities of imported edible and industrial oils. Imports of edible oils usually exceed exports, but there is a substantial net export of industrial oils.

By the late 1960's, production of both edible and industrial oils had dropped well below the levels prevailing in the early 1950's (tables 14 and 15).

Although output and exports of flaxseed have declined, Uruguay has retained its position as the world's fourth largest exporter of flaxseed and linseed oil, following Argentina, Canada, and the United States. Flaxseed is a winter crop, grown chiefly in the west and south. Seeding takes place in July-October and harvesting in December-February. Most of the crop is crushed for oil and by-products, largely for export.

The first sizable harvest of sunflower seed was in 1940. The crop gained popularity as a source of cooking oil during World War II, when olive oil was not readily available (3). The area sown declined in the early 1960's, showed considerable recovery in 1966 and 1967, but declined sharply again in 1968 and 1969. Unlike flaxseed, sunflowers are a summer crop, planted during the last quarter of the calendar year and harvested the following April-May. Unit yields are low, largely because of the practice of sowing sunflower seed as a second crop on wheat stubble and because of losses from disease, insects, and birds. The spreading use of certified seed is helping to reduce losses from disease, and experiments under way emphasize breeding for higher yields per hectare and for higher oil content of the seed.

Other Crops

Both sugar beets and sugarcane are grown in Uruguay, but beets account for more than four-fifths of total sugar output. Sugar production has risen sharply since the early 1950's, but Uruguay remains heavily dependent on imported sugar. Brazil is the principal source of raw sugar. Domestic output rose from an annual average of 21,000 tons (refined sugar equivalent) in 1953-55 to 51,000 in 1963-65, but declined again in 1967/68 to 31,000 tons. Imports declined from the mid-1950's to the mid-1960's, but in 1967/68 still represented 40 percent of total consumption (95,000 tons), compared with 76 percent of consumption (86,000 tons) in 1953-55.

The Government has fostered development of the domestic sugar industry by subsidizing it with profits obtained by selling imported sugar at the fixed, higher domestic price. Prices are set by the price-wage council, established in December 1968 to regulate wages and prices of the private sector.

Wine grapes are grown by nearly 8,000 producers, most of whose farms are small. Wine-grape varieties account for over 95 percent of all vines planted, and production of grapes for wine represented 9 percent of the value of total crop production in 1963 and more than 3 percent of the value of total farm output. Production in the mid-1960's averaged 130,000 tons annually. The Government fixes the price of grapes, usually after the size of the crop has been determined and a study of production costs and demand factors has been made.

Other fruits produced in Uruguay include citrus fruits and apples, peaches, pears, quinces, plums, melons, and olives. Total production of these fruits was estimated at 134,000 tons for 1963. Except for citrus fruits, which have been exported in small quantities only since 1961, all output of fruits is consumed in Uruguay. Imports of fruit exceed exports because bananas, which do not grow in Uruguay, are imported. Citrus fruits are produced mostly in the subtropical north. Deciduous fruit production, on the other hand, is highly concentrated in the south.

The value of vegetable production in 1963 almost equaled that of wine grapes and table fruits combined. Vegetables are grown in some quantity in all departamentos of Uruguay, but potato production is concentrated in the south. Potatoes and sweet potatoes are the principal vegetables, accounting for almost 40 percent of the value of vegetable output in 1963; dry legumes added another 4 percent. The remainder covered a wide variety of Temperate zone vegetables. Domestic production provides most of the vegetables consumed except for potatoes and dry legumes. Lentils and chickpeas are mostly imported, but beans and peas--which account for the bulk of legume production--are grown in sufficient quantity in most years.

Potatoes for both table consumption and seed have been imported. During the 1950's and early 1960's, imports consisted mainly of consumption potatoes, but in 1963-65 they were mostly for seed. Drought conditions in 1967-69 again necessitated imports of potatoes for consumption. Canada and Western Europe have been the traditional suppliers of potatoes. The United States sent potatoes to Uruguay for the first time under a P.L. 480 agreement signed in May 1968, which called for shipment of 50,000 tons of potatoes and potato products valued at US$3.5 million (including ocean transportation).

Uruguay produces little cotton, and imports most of the raw material for its textile industry. The usual harvest does not exceed 450 tons, lint basis.

FOREIGN TRADE IN FARM PRODUCTS

Agricultural products have always formed all but a small part of Uruguay's export trade. During 1960-67, their share of total exports, by value, dropped at one point to as low as 93 percent, but averaged 95 percent. In contrast, Uruguay's agricultural imports are relatively unimportant, usually accounting for less than a fifth of the value of all imports.

Exports

Although Uruguay trades with many Western Hemisphere countries, Western Europe has been and remains the chief outlet for Uruguay's traditional exports--wool, meat, and hides and skins. These items together accounted for almost 88 percent of the value of agricultural exports in 1967 (table 16). The leading market is the European Common Market, which takes large quantities of hides and skins, linseed oil and other oilseed products, and wool and meat. The United Kingdom is usually the leading single-country market for wool and meat. Spain became an important buyer of meat in the mid-1960's, and Eastern Europe took both wool and meat in the late 1950's and again in 1967. The United States is a good outlet for Uruguayan wool, and the Latin American Free Trade Association (see Agricultural Policies) is a major outlet for grain because of sales to Brazil.

Imports

A large part of the country's agricultural imports regularly consist of cotton, yerba maté, tobacco, bananas, coffee, and rubber (table 17); these are all products that are either not produced domestically or are produced only in small quantities. Sugar is another significant, regular import item. Grain

Table 16.--Value of Uruguay's agricultural exports, by commodity and country of destination, 1967 1/

Commodity	Peso value, f.o.b.									Total U.S. dollar value, f.o.b.
	European Common Market	United Kingdom	United States	LAFTA 2/	Spain	Eastern Europe 3/	Other	Total	Percentage of total, by commodity	
	Millions								Percent	Millions
Wool 4/	2,190	2,705	600	509	5	644	1,515	8,163	54.0	79
Meat and preparations	554	533	142	174	1,278	234	661	3,576	23.7	40
Hides and skins	997	25	192	12	7	112	186	1,531	10.1	13
Grains and preparations	17	2	0	642	0	179	208	1,048	6.9	7
Oilseed products 6/	285	49	0	9	5/	3	48	394	2.6	3
Other	31	33	77	202	4	4	51	402	2.7	6
Total	4,074	3,347	1,011	1,548	1,289	1,176	2,669	15,114	100.0	148
	Percent									
Percentage of total, by destination	27.0	22.1	6.7	10.2	8.5	7.8	17.7	100.0	...	...

1/ The Uruguayan peso fell heavily in value during 1967. Standing at Ur$75.90 per US$1 at the beginning of the year, the official buying rate was depreciated at intervals to Ur$98.00 per US$1 on August 11 and then to Ur$198 per US$1 on November 6. Dollar export value by commodity, as percentage of total agricultural export value, differs somewhat from the percentage of total calculated on peso value.

2/ Latin American Free Trade Association includes Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

3/ Includes the Soviet Union.

4/ Includes tops, noils, and wool waste; other exports mainly from Denmark (460), Hong Kong (454), and Japan (172).

5/ Less than 0.5 million pesos.

6/ Oil cake and meal and linseed oil.

Source: (11).

Table 17.--Value of Uruguay's agricultural imports, by commodity and country of origin, 1967 1/

Commodity	Peso value, c.i.f.								Total U.S. dollar value, f.o.b.
	LAFTA 2/					United States	Other	Total	Percentage of total, by commodity	
	Brazil	Paraguay	Argentina	Other	Total					
	Millions								Percent	Millions
Cotton	44	187	1	3/ 168	400	0	0	400	17.2	5
Yerba maté	330	7	3	1	341	0	0	341	14.6	4
Tobacco	38	45	10	29	122	123	4/ 67	312	13.4	4
Fruits, nuts, vegetables, and preparations, including hops	151	6	9	5	171	15	4/ 75	261	11.2	3
Seeds for sowing	5/	0	22	5/	22	16	4/ 193	231	9.9	3
Sugar and preparations	216	0	0	0	216	0	0	216	9.3	3
Coffee	57	43	3	14	117	0	3	120	5.1	1
Rubber	2	0	0	0	2	0	4/ 90	92	3.9	1
Corn and oats	13	0	76	0	89	0	0	89	3.8	1
Other	55	28	85	11	179	6/ 9	83	271	11.6	2
Total	906	315	210	228	1,659	6/ 163	511	2,333	100.0	27
	Percent									
Percentage of total, by origin	38.8	13.5	9.0	9.8	71.1	7.0	21.9	100.0	...	...

1/ The Uruguayan peso fell heavily in value during 1967. Standing at Ur$76.20 per US$1 at the beginning of the year, the official selling rate was depreciated at intervals to Ur$99 per US$1 on August 11 and then to Ur$200 per US$1 on November 6. Dollar import value by commodity, as percentage of total agricultural import value, differs somewhat from the percentage of total calculated on peso value. 2/ Latin American Free Trade Association includes Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela. 3/ Mainly from Mexico (92) and Peru (71). 4/ For "Other," tobacco came mainly from Cuba (27), the Philippines (19), and the Dominican Republic (15); fruits, nuts, vegetables, and preparations, mainly from Poland (45) and Romania (22); seeds for sowing, mainly from Australia (106), Canada (60), and the European Common Market (17); and rubber, mainly from West Malaysia (87). 5/ Less than 0.5 million pesos. 6/ These data evidently do not include P.L. 480 shipments.

Source: (12).

imports are usually small, but in years of poor grain harvests, wheat for consumption may lead all other imported farm products.

Most of Uruguay's agricultural imports come from Western Hemisphere sources. Brazil sends sugar, bananas, and yerba maté. Paraguay, Mexico, Brazil, and Peru have supplied most of the cotton since the formation of LAFTA. The United States was a major source of cotton imports in earlier years; in 1960-61, for example, somewhat more than 70 percent of Uruguay's raw cotton came from the United States. Although the United States is the leading source of tobacco, in 1967 the LAFTA countries together sent almost as much (in value) as the United States did. Because of shipments under P.L. 480, the United States ranked first as a source of wheat imports in 1960 and again in 1968.

U.S. Trade with Uruguay

The United States and Uruguay produce many of the same commodities, and agricultural trade between the two countries is small in most years. Although the major share of U.S. exports to Uruguay consists of nonagricultural products, they include agricultural inputs such as fertilizers and farm machinery. Even so, exports of agricultural items total more than US$2 million in most years (table 18). In years of poor harvests in Uruguay, they are substantially above this level; in 1960, for example, they totaled almost US$24 million. United States purchases of agricultural products from Uruguay vary widely from one year to another, but the trend appears to be downward (table 19).

Tobacco is traditionally the principal U.S. agricultural export to Uruguay, although cotton outranked it in value in 1959, and both cotton and grains outranked it in 1960. U.S. grain exports to Uruguay in 1960 reflected the heavy demand for foodstuffs resulting from unusually poor harvests of wheat and corn in Uruguay. The P.L. 480 program for the sale of U.S. agricultural commodities for foreign currency and on long-term credit, has been instrumental in maintaining sales to Uruguay. An exception is sales of cotton, a commodity Uruguay now purchases largely from LAFTA members. Preferential treatment for commodities moving within the LAFTA community has practically eliminated Uruguay's imports of U.S. cotton.

The first shipments to Uruguay under P.L. 480 were in 1956 under barter arrangements. The first sale for foreign currency was in 1959. From the beginning of the program in 1956 through 1967, the dollar value of sales under P.L. 480 totaled US$40.6 million, or 65 percent of U.S. agricultural exports to Uruguay in those years. Exports under U.S. Government programs jumped sharply in 1968. Most of the total was accounted for by sales of wheat and corn for long-term dollar credit (wheat, US$12 million; corn, US$4.8 million).

Agricultural imports usually account for more than three-fourths of the total value of U.S. imports from Uruguay. In 1967 the principal agricultural products imported into the United States--wool and meat--were both down significantly in value from the level of the previous 2 years. Drugs, herbs, roots and similar products are the only U.S. imports from Uruguay classed as complementary, or noncompetitive with products of the United States. Although carpet wool is considered complementary, Uruguay produces mainly apparel wool, which is

Table 18.--Value of U.S. exports to Uruguay, averages 1952-66, annual 1962-68

Commodity	Average 1952-56	Average 1957-61	Average 1962-66	1962	1963	1964	1965	1966	1967	1968
	1,000 U.S. dollars									
Tobacco	1,281	2,261	1,450	2,319	1,112	2,237	564	1,016	947	681
Cotton	314	2,853	115	473	0	0	0	100	0	0
Grains and preparations	1/	4,339	113	94	79	117	164	110	201	17,750
Food for relief or charity 2/	1/	70	357	220	379	448	450	289	492	211
Seeds, except oilseeds	132	105	202	77	62	280	365	226	383	135
Hops	1/	128	141	160	118	159	119	150	146	170
Other agricultural	584	692	294	339	263	306	250	314	296	959
Total agricultural	2,311	10,448	2,672	3,682	2,013	3,547	1,912	2,205	2,465	19,906
(Under P.L. 480 and other assistance programs)	(3/ 77)	(6,900)	(924)	(1,663)	(623)	(878)	(801)	(653)	(801)	(18,422)
Nonagricultural	33,795	32,128	27,695	40,554	27,862	31,836	17,505	20,717	19,049	18,371
Total exports	36,106	42,576	30,367	44,236	29,875	35,383	19,417	22,922	21,514	38,277

1/ If any, included in other agricultural.
2/ Excludes grains and preparations.
3/ $387 in 1956 only.

Sources: (16) (17).

Table 19.--Value of U.S. imports from Uruguay, averages 1952-66, annual 1962-68

Commodity	Average 1952-56	Average 1957-61	Average 1962-66	1962	1963	1964	1965	1966	1967	1968
	1,000 U.S. dollars									
Wool	23,373	8,262	12,611	11,732	11,465	2,838	19,828	17,192	4,746	9,832
Meat 1/	4,422	4,194	5,024	5,833	5,431	4,899	5,466	3,492	1,691	2,779
Animal hair	447	235	476	428	440	441	480	589	498	548
Casein or lactarene	2/	133	495	269	583	551	513	560	308	238
Drugs, herbs, roots, etc.	2/	91	84	49	81	71	98	120	96	145
Other agricultural	1,765	367	470	218	288	391	509	947	771	546
Total agricultural	30,007	13,282	19,160	18,529	18,288	9,191	26,894	22,900	8,110	14,088
Nonagricultural	8,701	4,057	5,947	5,408	6,075	3,593	6,618	8,041	5,835	7,879
Total imports	38,708	17,339	25,107	23,937	24,363	12,784	33,512	30,941	13,945	21,967

1/ Mainly canned beef.
2/ Included in "other agricultural," which also includes hides and skins.

Source: (16).

mpetitive with wools produced in the United States. In 1965, when U.S. wool ports from Uruguay reached a value of US$19.8 million, they represented 8.6 rcent of all supplementary wool imports. The reduced value in 1967 was 4.6 rcent of apparel wool imports into the United States.

AGRICULTURAL PROSPECTS

Uruguay has excellent potential for greatly expanding its agricultural utput. Few farmers now use modern agricultural techniques, and unit yields f crops and livestock are therefore low. But policies and programs set forth n the Agricultural Development Plan, 1965-74, seem in general well designed o intensify agricultural production. These plans call for an increase in gricultural output by 1974 of at least 38 percent over the 1963 level, as hown in the following projections (1974 as percentage of 1963):

	Crops	Livestock	Total agriculture
Without agrarian reform	160	126	138
With agrarian reform	194	137	158

Although program delays make the goal for 1974 seem high, the projected growth rate of 4 to 5 percent a year is realistic, given a reasonable degree of economic and political stability in the country. The plan may well overstate prospective increases for some crops, while understating them for livestock products. There is doubt, for example, as to the technical and economic feasibility of more than doubling wheat output in a decade, mainly through increased yields. Some technicians believe that many parts of Uruguay are marginal for wheat production, considering the climatic, hydrological, and soil conditions. On the other hand, successful pasture improvement has already been demonstrated under the Plan Agropecuario. Livestock output may well rise faster than projected by 1974. In any case, if weather conditions are reasonably good for crops over the 1969-74 seasons, total crop output may also increase sharply. The year-to-year outlook for both crop and livestock production in Uruguay is affected by the wide extremes in weather conditions. The 1968 wool clip, for example, was cut by severe drought that reduced pasture feed and encouraged marketing of sheep; also, the heavy rainfall of December 1968 damaged the wheat crop that was being harvested, and reduced average yields per hectare.

Basic problems remain to be solved. Major factors still limiting progress include tax policies, scarcity of farm credit, limited extension services, and inadequate technical knowledge among farmers. The low level of technical knowledge reflects a lack of interest and incentive on the part of absentee landowners and wealthier farm operators. Among poorer farmers, it is often associated with poor general education as well as poor vocational education.

The Agricultural Development Plan, 1965-74, however, makes recommendations that, if carried through, could provide the structure for agricultural growth. Included in the recommendations are improved extension services, expanded research and experimentation, and increased agricultural credit. Action already taken to ensure realistic product and input prices through maintenance of adequate foreign exchange and tax policies needs to be continued and strengthened.

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ALGERIA'S AGRICULTURAL ECONOMY IN BRIEF

By Margaret Missiaen

RS-FOREIGN 300 FOREIGN REGIONAL ANALYSIS DIVISION MAY 1970

ABSTRACT

The agricultural sector of the Algerian economy contributes an average of 10-12 percent of gross domestic product. While the most important food crops are wheat and barley, wine is the largest agricultural export. The war for independence and wine-marketing difficulties have caused setbacks in the economy of the country, but increasing petroleum production has offset these problems to some degree.

Key Words: North Africa, Algeria, Agricultural production, Agricultural trade, Agricultural statistics.

SUMMARY*

The Algerian economy is recovering from the difficult period the country went through in the years just before and after independence from France in 1962. A reorientation of the economy away from the French market toward national needs has been necessary. The dualism of the colonial period is still very evident in the structure of the country's agriculture. There is a modern sector of former French farms that has largely been socialized and a traditional sector that is still in private hands. While the modern farms produce mainly commercial crops, production on the traditional farms is still mostly of a subsistence nature.

Agriculture's contribution to gross domestic product (GDP) has been declining in recent years as the petroleum sector becomes more important. The portion of GDP from agriculture now averages 10 to 12 percent. Although wine is still Algeria's leading agricultural export, petroleum and natural gas have taken the place of wine as the country's major source of foreign exchange.

*This report supersedes ERS-Foreign 131, Algeria's Agricultural Economy in Brief, July 1965.

THE LAND

Algeria occupies an area of approximately 920,000 square miles, almost one-third the area of the continental United States. Of this, only about 20 percent can be used for agricultural purposes--farming and grazing. By far the most important agricultural section of the country is a rectangular, largely moun-

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tainous region stretching about 620 miles along the Mediterranean coast between Morocco and Tunisia and extending inland about 200 miles. Algeria's Saharan region covers more than 800,000 square miles and is bordered by Libya, Niger, Mali, Mauritania, Spanish Sahara, Morocco, and Tunisia.

The geography of northern Algeria features two Atlas Mountain chains, the Tellian and the Saharan, which cross the country laterally, paralleling Algeria's Mediterranean coast. The region between the coast and the Tellian Atlas Mountain chain is called the Tell; and the inland area between the two mountain chains is the High Plateau. The Tell varies in width from 80 miles in the west to 200 miles in the east. This fertile littoral is favored by a moderate climate and rainfall averaging 16 to 40 inches annually. The temperature seldom exceeds 100° F. during the summer or falls below freezing in the winter. In this area are extensive market gardens, orchards, and vineyards.

Bordering the littoral is a zone of plains and valleys that are planted mainly to vineyards, cereals, citrus and other fruits, and industrial and forage crops. Even the mountain elevations of the Tell are intensively farmed. In the western part of this region viticulture predominates, but sizable acreages are also planted to other fruits, wheat, and barley. Livestock are pastured on the mountain plains. To the east, extensive grasslands and cork forests cover the higest elevations, and orchards of figs and olives are found at middle altitudes. At the lowest elevations, crops are similar to those of the littoral.

There are no large, permanent rivers in the Tell, but only intermittent streams (oueds). In winter, these streams are full, and frequently flood following the rains; but in summer, they are merely muddy trickles or dry beds.

Stretching between the Tellian and Saharan Atlas Mountain chains, the High Plateau is a vast, undulating, steppe-like plain. Wedge-shaped, this plateau is 125 miles wide in Oran in the west; as it rolls east, it narrows to a series of small valleys between hills and mountains in the Department of Constantine. Averaging almost 3,000 feet above sea level and partially cut off from the moist Mediterranean winds by the Tellian Atlas, the High Plateau receives substantially less rainfall than the coastal plain. From east to west a line of landlocked salt ponds (chotts) punctuates the plateau. These depressions are marshy or, in summer, dry and crusted with salt. Agriculture on the High Plateau is confined primarily to the cultivation of cereals (wheat and barley), collection of esparto grass (used for weaving and paper manufacture), and grazing of livestock (primarily sheep), and occasionally to fruit and vegetable crops.

The Saharan territory is of minor agricultural importance. Oases are scattered throughout this area, in the foothills and steppes just south of the Saharan Atlas as well as in the desert. The people of the oases produce subsistence crops of cereal, fruits, vegetables, and dates.

Climate

Algeria's annual rainfall varies from as much as 40 inches in the northeast to practically none in the south. The summers are generally dry, with most of the rain falling from October to March. Precipitation, however, is often not well distributed. Much of the annual rainfall may be concentrated over a few weeks' time. Rain usually comes in brief, heavy torrents, eroding mountains, stripping slopes, and flooding stream banks.

Land Use

The almost 20 percent of Algeria's land considered to be agricultural (excluding forests) is used for various agricultural purposes. As shown in table 1, this land is divided between the socialized and private sectors.

THE PEOPLE

The mid-1969 population of Algeria was estimated at 13.4 million and is growing at an annual rate of more than 3 percent. Of the indigenous people, about four-fifths are Arabic-speaking mixtures of Arabs and Berbers, and the rest are more or less pure-blooded Berbers who speak various dialects of their own language. There are approximately 200,000 other people (mostly French and Moroccans)

Table 1.--Land use in Algeria, 1964

Use	Socialized sector	Private sector	Public sector	Total
	1,000 hectares 1/			
Annual crops:				
Cereals	753	2,049	0	2,802
Other crops	76	137	0	213
Fallow land	655	2,462	0	3,117
Permanent crops:				
Vineyards	318	45	0	363
Orchards	86	172	0	258
Total cultivated land	1,888	4,865	0	6,753
Improved pastures	16	21	0	37
Natural pastures	327	34,047	0	34,374
Unproductive land	72	1,214	0	1,286
Esparto grass zones	0	0	3,037	3,037
Total agricultural land	2,303	40,147	3,037	45,487
Forest	107	301	2,016	2,424
Unproductive land and desert	0	0	189,645	189,645
Total area	2,410	40,448	194,698	237,556

1/ One hectare = 2.471 acres.

living in Algeria. The European minority, which totaled about 1 million before independence in 1962, now numbers less than 100,000.

The density of the population is about 15 persons per square mile. However, the figure is misleading since about 90 percent of the people live on 10 percent of the land, mainly in the coastal area along the Mediterranean. Vast areas of the South are largely uninhabited. In 1966, 38 percent of the population lived in urban or semiurban areas.

The Algerian labor force was estimated at 2.6 million in 1966. About 50 percent of the workers were in agriculture, 14 percent in services, 6 percent in manufacturing, and 30 percent in other occupations. Approximately 60 percent of the population relies on agriculture for a living. There are 275,000 Algerians employed in Europe, mainly in **France**.

ECONOMIC SITUATION

Prior to the country's independence in July 1962, the Algerian economy was basically a dual one, incorporating a well developed, market-oriented sector integrated with the French economy and a poor, traditional, essentially subsistence sector. In recent years, the country has been feeling its way toward an independent, truly national economy in which all sectors would share in the benefits of development.

The sudden departure of most of the million Europeans residing in Algeria at the end of 1962 dealt a severe setback to the economy of the country. With them went a large percentage of Algeria's skilled labor, civil administrators, engineers, entrepreneurs, and working capital. Practically all industries were closed down, causing the unemployment rate to jump to 70 percent. The Europeans, who owned 2.8 million hec-

res of the best agricultural land in Alge-
a, abandoned their farms and in some cases
en destroyed equipment. Gross national
oduct, which had increased at an annual
te of 7 percent during the 1950's, fell by
percent between 1960 and 1963.

The economy is now showing signs of re-
very. Gross domestic product, at constant
ices, is estimated to have risen from $3.2
illion in 1966 to $3.7 billion in 1968, an
ncrease of about 15 percent. This growth
as largely due to expanding petroleum pro-
uction. Agriculture's contribution to GDP
as only 9.4 percent in 1966, a drought
ear, but rose to 13.0 percent in 1968, when
here was a relatively good harvest. The
ontribution of the petroleum sector in-
reased during the same period from 16.9
ercent to 21.6 percent. Production of
rude oil amounted to 43 million tons 1/in
968, compared with 34 million tons 2 years
arlier. Petroleum and natural gas have
eplaced wine as the country's major source
f foreign exchange earnings.

Algeria has a well-developed transpor-
ation system that was largely built to sat-
sfy the needs of the colonial economy.
ailroads are the most important part of the
ystem. Of 3,900 kilometers of track, 2,600
ilometers are standard guage. The system
onsists of a main, east-west line (which
ontinues into Morocco) and several branches
inking the urban centers and the rich agri-
cultural regions to the main ports and
cities on the coast. Three lines bring min-
eral products of the Sahara to the coast.

Algeria has around 80,000 kilometers of
improved roads. This system is also concen-
trated in the north, with three main roads
running from the coast into the Sahara.

Algeria's eight commercial ports are
well equipped. The most important ports are
Algiers, which is one of the largest in both
Africa and the Mediterranean area, and Be-
jaia, Oran, Arzew, Annaba, and Skikda. The
port of Bejaia has assumed importance in
recent years as the exporting terminal of
the petroleum pipeline from the north-cen-
tral Sahara fields. The port of Arzew has
gained importance from two pipelines--one
for petroleum and one for natural gas--and
as a center of gas petroleum processing in-
dustries. Annaba is the major port for the
export of iron ore and phosphates.

1/ Tonnages in this report are metric.

Algeria's principal international air-
port is Dar El Beida, near Algiers. Other
smaller but modern airports, all of which
can accommodate jet aircraft, are located
at Oran, Annaba, and Constantine.

AGRICULTURAL STRUCTURE

The agricultural economy of Algeria
is divided into two major sectors--modern
and traditional. The traditional sector
is still largely in private hands. While
the socialized or autogere farms occupy
only one-third of the land under culti-
vation, they produce 50 to 60 percent of
the value of agricultural output. The
preindependence distinction between French
farms and Algerian farms was eliminated by
nationalization. The division between
modern and traditional farms still exists.

The Modern Sector

Of the 2.8 million hectares in the
modern sector of Algeria's agricultural
economy, 2.3 million hectares are in so-
cialized farms. Farms on the 2.8 million
hectares were formerly owned by the French
colonists. These farms are on the best land
in the country and on most of the irrigated
area. They have most of the farm machinery
and produce practically all of Algeria's
agricultural exports. The autogere or self-
managed, socialized farms that occupy 2.3
million hectares of this modern sector were
largely abandoned by their owners shortly
after Algeria's independence. Initially,
management of most of the vacant proper-
ties was taken over by their workers to en-
sure continued production. Through a
series of decrees issued in late 1962 and
in 1963, ownership of vacant and worker-
occupied properties was vested in the
State, with management of the properties
entrusted to collective enterprises known
as self-managed or autogere units. "Self-
management" in this sense is a hybrid of
State ownership and worker cooperatives.
It differs from the former in that control
of the operation of the enterprise theoret-
ically is in the hands of the workers them-
selves, and from the latter in that owner-
ship of the property lies with the State.
About 500,000 hectares in the modern sec-
tor are privately owned, mostly by Alge-
rians.

The autogere farms include 90 percent of the area used for growing grapes and citrus but only 27 percent of the land devoted to cereals. They have 14,000 of the estimated 19,000 tractors in the country. Almost all of Algeria's skilled agricultural technicians and about 140,000 permanent workers are employed on these farms. Additional laborers are hired during peak seasons.

During the last few years, the number of self-managed units has been reduced from 2,800 units to 1,800 so that skilled technicians and managers can be used more effectively. The average size of the farms ranges from 100 hectares in areas of intensive cultivation to 2,000 hectares in regions where cereals are grown.

The Traditional Sector

The traditional sector is characterized by a large number of small, family farms in the less fertile mountain areas. The main crops produced in this sector are cereals, olives, figs, and dates. The bulk of the country's livestock is raised by traditional farmers. Productivity of the traditional farmers is adversely affected by the small size of their holdings. In 1967, there were 587,000 landowners in the private sector; of these, 423,000 owned less than 10 hectares, 147,000 between 10 and 50 hectares, and only 17,000 more than 50 hectares. Other factors limiting output are the poor quality of the soil, severe erosion, lack of irrigation and modern equipment, and a shortage of capital and credit.

IRRIGATION

Irrigation has been practiced in Algeria for several thousand years. Vestiges of vast flood control and irrigation systems provide proof that in the past large irrigation projects were carried out even in the areas now regarded as submarginal. Algeria's climate makes irrigation essential if good crops are to be produced every year. Rainfall is often insufficient as well as extremely irregular. The traditional farmers continually face the threat of a crop failure since few of them own any irrigated land.

About 200,000 hectares are estimated to be effectively irrigated in Algeria. This area represents less than 5 percent of the total land area under cultivation. The principal crops irrigated are citrus, truc crops, and date palms.

AGRICULTURAL PRODUCTION

Less than 20 percent of Algeria's lar is agriculturally usable; only 3 percent o this is cultivated and the remaining agricultural land consists of pastures and esparto grass zones. Agricultural output in Algeria varies widely from year to year depending on the amount and distribution of rainfall. The U.S. Department of Agriculture's Indices of Agricultural Producti show that per capita agricultural producti fell from 106 in 1960 to 58 in 1966; it ro to 77 in 1968 but fell again to 65 in 1969 because of a smaller cereal crop (1957-59 100). Wheat is the most important crop pr duced in Algeria, followed by grapes for wine, citrus, fresh vegetables (potatoes and tomatoes), and dates (table 2).

Wine

Grapes for wine are by far the most i portant commercial crop produced in Algeri but their importance has declined rapidly recent years. As late as 1965, vineyards occupied only one-tenth of cultivated land but grapes in the form of wine contributed nearly one-third of the value of agricultural production. Grapes are grown almost exclusively on the self-managed farms. Vineyards are limited by climatic factors to a strip less than 100 miles wide along the Mediterranean coast and concentrated in zones near Algiers and Oran, and, to a lesser extent, near Annaba.

Wine production was introduced and de veloped by French settlers as a complement to the French wine industry; the Algerian wines with high alcohol content being mixe with lighter products from French vineyard Now, however, the Algerian Government, fac with marketing problems, has taken steps t convert the land used for grape production to other uses such as pastures, and fruit, vegetable, and industrial crop production. Before 1962, vineyards covered about 350,0 hectares, with average yields of 40 hectol ters 2/ of wine per hectare. Average annu production was 14 to 18 million hectoliter (table 3). The area in grapes for wine de clined from 337,500 hectares in 1966 to

2/ hectoliter (hl.) = 100 liters or 26.4 U.S. gallons.

Table 2.--Production of major crops, Algeria, averages 1955-64, annual 1966-69

Crop	Average 1955-59	Average 1960-64	1966	1967	1968	Prelim. 1969
	1,000 metric tons					
Wheat	1,287	1,281	630	1,266	1,534	1,250
Barley	751	576	130	340	538	300
Oats	68	36	7	18	20	15
Rice, paddy	7	7	6	6	7	6
Corn	9	8	3	6	7	6
Pulses	49	36	30	31	35	37
Potatoes	236	233	170	204	272	275
Tobacco	14	8	14	13	14	14
Tomatoes	136	109	82	69	84	100
Citrus fruit	356	405	401	400	430	440
Grapes for wine 1/	2,051	1,646	866	847	1,276	1,016
Figs, dried	22	18	16	16	16	15
Dates	109	124	115	120	85	50
Olive oil	20	17	16	22	18	22

1/ Computed from wine production data at the rate of 1,000 tons of grapes per 787.4 tons of wine.

302,200 hectares in 1968. The drop in production, however, has largely been due to reduced yields. Unfortunately, much of the land now devoted to vineyards is not suitable for other crops. Some experts have suggested that these areas be used for producing table grapes and grapes for processing into juice, raisins, vinegar, and brandy.

The Office National de Commercialisation des Produits Viti-Vinicoles (ONCV), established in August 1968, buys all the wine and arranges for its distribution and sales at home and abroad.

Cereals

Cereals represent 25 to 30 percent of the value of Algeria's agricultural production. Most of the cereals are produced on small farms in the private sector. Durum (hard) wheat and barley are the main subsistence crops, and bread (soft) wheat and oats are produced for the market. These winter cereals are sown from October to December after the first rains begin and harvested from May to July. Summer cereals (rice and corn) are planted in the spring and harvested in late summer and fall; only small amounts of these are produced (table 2).

Grain yields vary widely from year to year in Algeria. Average yields for 1963-65 are shown in table 4.

Citrus Fruit

Citrus groves in Algeria are situated on the plains around the coastal cities, particularly around Algiers. Almost all were formerly owned by Europeans but are now the property of self-managed farms. Of the 46,000 hectares of citrus trees, approximately 34,000 hectares are planted to oranges, 7,000 to clementines, 3,000 to tangerines, and 2,000 to lemons, grapefruit, and other citrus. During 1964-66, oranges averaged 70 percent of total production; clementines, 17 percent; tangerines, 8 percent; lemons, 4 percent; and grapefruit and other citrus, 1 percent. (See table 2 for total citrus production.)

The recently organized Office des Fruits et Legumes d'Algerie (OFLA) has been charged primarily with the sale of Algeria's citrus fruit. Formerly, citrus producers concentrated on early and late varieties which

Table 3.--Production and exports of Algerian wine, 1959-67

Year	Production of previous year	Exports, specified year		Value per hl. [1/], specified yea	
		Total	To France	France	Other countries
	1,000 hl. [1/]			Dollars	
1959	13,827	13,200	12,920	13.78	12.97
1960	18,601	14,693	14,349	14.51	9.32
1961	15,851	13,157	12,791	14.53	8.10
1962	13,632	15,012	14,662	14.36	6.89
1963	12,279	7,212	6,804	15.05	7.29
1964	12,575	9,400	9,048	16.29	7.50
1965	10,477	8,640	8,200	15.28	7.09
1966	14,026	9,292	8,342	14.10	6.69
1967	6,822	4,807	2,975	13.74	8.91

1/ 1 hectoliter (hl.) = 100 liters or 26.4 U.S. gallons.

Source: Oliver, R. L'Algerie, Etude economique. Rome, United Nations Food and Agriculture Organization, 1969. Documents Statistiques sur le Commerce Exterieur de l'Algerie, 1967.

Table 4.--Yields of selected cereals in Algeria, average 1963-65.

Cereal	Socialized sector		Private sector	
	Yield per ha. [1/]	Yield per acre	Yield per ha. [1/]	Yield per acre
	Quintals [2/]	Bushels	Quintals [2/]	Bushels
Durum wheat	8.1	12.0	5.7	8.5
Bread wheat	7.0	10.5	5.6	8.3
Barley	8.8	16.4	6.0	11.1

1/ 1 hectare (ha.) = 2.471 acres. 2/ 1 quintal = 100 kilograms or 220.46 pounds.

brought premium prices, but now most Algerian fruit reaches the European market at the same time (from December through March) as the citrus from competitors. The main duty of OFLA will be to improve the marketing procedures used.

Other Crops

In addition to garden vegetables raised by most small farmers and vegetables that are an important culture of the oases, Algeria has a valuable commercial truck farming industry. Concentrated within a few miles of the coast near the large cities, it supplies onions, melons, potatoes, tomatoes, green beans, peas, artichokes, and carrots, primarily for the domestic urban population but also for export. Both production and export of fresh vegetables have declined since 1960. In 1960, 890,000 tons of vegetables were harvested from 85,400 hectares; by 1967, only 572,0 tons were harvested from 78,640 hectares. However, production did increase between 1966 and 1967.

Olives grow in rather poor soils on the slopes of the Tellian Mountains betwe the coast and the High Plateau, particularly in eastern Algeria. Nearly half th production comes from Kabylia, primarily from wild trees, and a large part of the production is consumed locally. There ar

me cultivated groves near Algiers and Oran at produce both olives and olive oil for port. (See table 2 for production of ive oil.) Alfa (esparto grass) grows wild clumps 3 feet high and is used locally for eaving into a variety of household items. ost of the alfa that enters commercial annels is gathered and processed by self-anaged enterprises. Annual production av-rages 100,000 to 150,000 tons, with 40,000 50,000 tons exported--mainly to the nited Kingdom.

ivestock

Livestock numbers in Algeria were re-uced between 1960 and 1964 by epidemics and he war for independence (table 5). In an ffort to reconstitute herds, the Government as imported large numbers of cattle and heep and has expanded its stockbreeding tations and artificial insemination and eterinary centers. About 95 percent of the ivestock are owned by the private sector. ivestock accounts for about one-fourth of he value of agricultural output.

AGRICULTURAL POLICY

Under the Government's proclaimed so-cialist option and the corollary system of self-managed farms, agriculture's most pro-ductive sector is the property of the na-tion. This ownership gives to the Govern-ment a far-reaching and direct role in the functioning of the agricultural sector. In early 1967, the Government made some changes in the structure of the self-managed farms to improve their efficiency. The reorgani-zation had a twofold aim: limitation of State control and wider autonomy to inde-pendently managed enterprises.

The Ministry of Agriculture is respon-sible for appointing and controlling the directors of autogere farms. Actual man-agement of a farm, however, is assigned to a president and three bodies made up of and acting as representatives of the work-ers--a general assembly, a workers' coun-cil, and a managing committee--so that a farm becomes fully responsible for its own operation. At the same time, the workers have the right to cultivate for themselves a plot of land of 2 hectares, and engage in some animal husbandry on the farm. Under the new provisions, part of the farms' prof-its are paid back to the workers for their labor, and workers also receive productivity premiums.

Officials have also stated their inten-tion to extend socialization of the rural sector by taking over those private farms belonging to persons who are not dependent on them but have other sources of income. Officials also plan to eliminate the large private estates by reducing the amount of land that can be held by one person. The proprietors of these lands are to be indem-nified.

Government agencies are responsible for marketing crops produced on autogere farms. Most crops (except cereals and dry legumes) grown in the private sector are not marketed through Government agencies; however, there are price controls for many products at the wholesale and retail levels.

Table 5.--Livestock numbers in Algeria, 1960, 1964, and 1967

Livestock	1960	1964	1967
		1,000 head	
Cattle	623	531	800
Sheep	5,360	5,000	7,130
Goats	2,016	1,642	3,000
Horses	160	117	132
Mules	188	147	173
Donkeys	341	248	326
Camels	209	175	175
Swine	62	12	1/ 3

1/ 1966.

The Office Algerien Interprofessional des Cereals (OAIC) has a monopoly on marketing and stocking cereals and certain pulses and for assuring consumers adequate supplies of cereals at stable prices. All processing plants for bread and durum wheat have been nationalized. Fixed prices are guaranteed to producers for wheat. In 1968, the price for durum wheat was raised from $103 to $109 per ton and for bread wheat from $89 to $97 per ton. The consumer price was not altered, and the increase was financed by the OAIC from profits on cereal imports and other operations.

The Union Nationale des Cooperatives Agricoles des Commercialisation is responsible for marketing other crops produced by the socialized sector except for wine and citrus (see sections on wine and citrus).

During the 1967/68 crop season, credit to self-managed agriculture was extented by the Banque Nationale d'Algerie (BNA).

Appropriations for the 1969 investment budget, which represents the third phase of the 3-year development plan, are set at $1,240 million--twice the amount for 1968. Industry has the largest allotment with $740 million. Agriculture is to receive the second largest allocation, $128 million.

Algeria's new 4-year development plan is to go into effect in 1970. Indications are that about $5 billion will be expended on economic and social programs during the 4-year period 1970-73, with a goal of achieving a growth rate of 6 percent per year. Fifty percent of the expenditures will be directed toward industry. Agriculture will be the third area of emphasis after education. The Government hopes to reach self-sufficiency in foodstuffs by 1980.

AGRICULTURAL TRADE

The story of Algeria's wine exports has been the story of Algeria's total agricultural exports during the last few years. Roughly, total agricultural exports have fallen from a 1956-60 average of $320 million annually to $142 million in 1968. This drop was due largely to a more than $130 million decrease in the value of wine exports during 1956-68. Agricultural commodities as a percentage of total exports have declined from 75 percent to less than 20 percent during this period (table 6).

After independence, Algeria signed a 5-year agreement with France that set guaranteed annual quotas for Algerian win These quotas were to decrease from 8.8 mi lion hectoliters in 1964 to 7.0 million i 1968. This agreement was observed for 3 years; but in February 1967, the French Government suspended all foreign wine imports. In August 1967, it forbade the mi ture of foreign with domestic wines, the principal use of Algerian wine in France. Later, the ban on wine imports was partially relaxed for Algeria, and a mixture of 10 percent, later raised to 25 percent with domestic wines was allowed for Algeria's wine. France agreed to import 3.5 million hectoliters of Algerian wine in 1967 and in 1968. The USSR has agreed to import 5 million hectoliters of Algerian wine for 7 years beginning in 1968. Wine exports for 1968 are estimated as follows

	Hectoliter
Franc zone (500,000 hl. outside of France)	4,000,00
USSR	5,000,00
Others	500,00

This is a considerable improvement over t situation in 1967.

Citrus exports have decreased since independence because capital has not been available for improvements in the groves. Also, while Algeria's exports of cereals have declined rapidly, imports have increased because adverse weather condition have caused poor crops.

Agricultural imports have been decre ing at approximately the same rate as tot imports. For 1956-60, agricultural goods averaged 21 percent of total imports. By 1968, the percentage was only slightly hi er at 23 percent. Cereals have replaced sugar as the most valuable agricultural i port (table 7).

A major shift in the direction of Al ria's trade has taken place since indepen dence. France provided an average of 80 percent of Algeria's imports and took 81 percent of her exports during 1956-60. B 1967, France was providing only 60 percen of the imports and taking 59 percent of t exports.

Even though detailed information on Algeria's trade for 1968 is not yet avail able, data for some categories have been

ublished. The most valuable agricultural commodities in Algeria's foreign trade in 1968 were:

	Million dollars
Imports:	
Grains	43.7
Dairy products	22.1
Cotton	16.6
Sugar	14.5
Coffee, tea, and spices	13.3
Exports:	
Beverages (mostly wine)	76.8
Fruit and nuts	27.4
Vegetable and fruit preparations	8.1
Vegetables	6.9

U.S. - Algerian Trade

According to U.S. trade statistics, U.S. exports of farm products to Algeria fell sharply between 1966 and 1967, but increased in 1968 and 1969 (table 8). Wheat and wheat flour are by far the most important U.S. agricultural commodities shipped to Algeria. In 1966, 1967, and 1969, some wheat, wheat flour, bulgur wheat, and soybean oil were provided to the Algerians under Public Law 480. Sales of cotton to Algeria were up sharply in 1968.

U.S. imports of Algerian agricultural goods have been very limited, averaging about $200,000 annually over 1966-68 (table 9). Essential oils, used primarily in making perfumes, and spices accounted for most of this trade.

Table 6.--Quantity and value of Algeria's principal agricultural exports, by leading country of destination, average 1956-60, annual 1966-67

Commodity and country	Quantity			Value		
	Average 1956-60	1966	1967	Average 1956-60	1966	1967
	1,000 metric tons			1,000 dollars		
Wine	1,389.2	933.0	485.1	209,298	121,491	56,425
France	1,364.7	828.6	297.5	204,401	112,242	40,366
USSR	1/	.5	34.3	1/	67	4,608
West Germany	1/	51.2	53.7	1/	3,427	3,585
Belgium-Luxembourg	1/	14.1	21.4	1/	1,067	1,509
Oranges and other citrus	233	246.6	182.7	30,066	36,220	22,616
France	227	213.1	130.1	29,480	33,196	17,006
USSR	1/	19.0	21.1	1/	1,530	1,838
West Germany	1/	7.3	12.3	1/	808	1,230
Vegetables, fresh and dried	2/175	47.1	70.2	2/22,140	6,656	10,307
Potatoes	69	17.9	42.4	6,766	2,056	4,778
France	64	17.9	39.5	6,376	2,056	4,470
Tomatoes	3/52	11.8	10.2	3/6,086	2,332	2,251
France	51	11.8	10.2	6,058	2,323	2,242
Hides and skins	10	7.9	5.7	7,707	7,487	6,219
France	6	6.4	5.1	4,909	6,402	5,525
Bran	4/	71.8	101.9	4/	3,375	5,128
France		43.2	64.5		2,079	3,302
Ireland		4.9	21.1		229	1,017
Esparto grass	4/	47.5	37.0	4/	1,315	1,042
Olive oil	5	5.5	.6	3,389	3,506	419
Wheat flour and semolina	66	1.9	2.9	11,694	267	411
France	66	1.9	2.9	11,682	266	410
Tobacco	7	.2	1.4	4,903	134	784
Barley	67	0	0	3,815	0	0
Other agricultural exports				27,532	19,625	17,007
Total agricultural exports				320,544	200,076	120,358
Nonagricultural exports				106,756	413,825	594,003
Total exports				427,301	613,901	714,361
France				345,301	414,108	423,619
West Germany				8,527	50,535	89,502
United Kingdom				21,747	36,410	39,769
Italy				7,701	21,212	24,926
Switzerland				1,204	7,337	24,581

Note: Detail may not add to total because of rounding.

1/ Data for these countries are not shown separately, but are included in totals.

2/ Fresh vegetables only.

3/ Average of 1959-60 only.

4/ If any, commodity is included in other agricultural exports and quantity is reflected in totals.

Source: Documents Statistiques sur le Commerce Exterieur de l'Algerie.

Table 7.--Algeria's principal agricultural imports, by leading country of origin, and by quantity and value, average 1956-60, annual 1966-67

Commodity and country	Quantity			Value		
	Average 1956-60	1966	1967	Average 1956-60	1966	1967
	1,000 metric tons			1,000 dollars		
Wheat, hard and soft	261	495.2	693.9	24,293	37,725	52,494
United States	25	387.7	304.0	1,835	30,266	24,078
USSR	9	0	172.6	810	0	12,933
Greece	1/	30.3	61.7	1/	2,120	4,572
France	113	68.1	65.2	8,706	4,709	4,163
Barley	2/	40.3	35.8	2/	2,732	2,365
Dairy products	45	75.9	85.1	32,628	25,291	25,815
Milk and cream	3/21	65.8	74.4	3/8,981	17,533	18,955
France	15	64.4	65.8	6,464	17,012	15,876
Cheese	17	5.6	4.8	16,438	4,800	3,953
Sugar	203	204.5	297.1	38,231	27,114	25,484
France	180	117.9	94.8	35,354	24,477	11,620
USSR	1/	11.2	47.9	1/	821	3,598
Coffee	28	13.2	47.2	21,205	8,429	24,853
Brazil	1	3.0	22.2	948	1,552	11,526
Ivory Coast	1/	5.1	20.7	1/	3,074	11,105
Vegetable oils and fats	38	34.4	38.7	15,667	8,937	9,677
USSR	1/	9.0	22.9	1/	2,373	5,706
Oilseeds	54	57.2	61.2	10,339	8,102	8,540
Rapeseed	33	48.9	55.7	5,160	6,495	7,353
France	13	48.9	51.7	2,197	6,495	6,816
	1,000 head					
Cattle	45	10.4	9.9	4,493	4,673	4,828
France	43	9.4	7.2	4,412	4,265	3,747
	1,000 metric tons					
Meat and meat preparations	20	3.5	2.0	20,059	4,684	2,557
Tobacco	7	4.0	3.6	4,078	2,244	2,030
Other agricultural imports				52,358	31,043	26,153
Total agricultural imports				221,190	160,974	184,796
Nonagricultural imports				849,266	469,732	446,022
Total imports				1,070,456	630,706	630,818
France				858,168	433,347	375,521
United States				37,229	60,495	50,315
USSR				4/3,350	7,870	28,390
Italy				6,640	18,271	20,508
West Germany				7,521	14,028	19,326

Note: Detail may not add to total because of rounding.
1/ Data for these countries are not shown separately, but are included in totals.
2/ If any, commodity is included in other agricultural imports, and quantity is reflected in totals. 3/ Excluding fresh milk. 4/ Average of 1958-59 only.

Source: Documents Statistiques sur le Commerce Exterieur de l'Algerie.

Table 8.--U.S. exports to Algeria, 1966-69

Commodity	1966	1967	1968	1969
	- - - - - - 1,000 dollars - - - - - -			
Dairy products (nonfat dry milk, PL 480)	0	830	0	923
Grains and preparations	44,977	16,234	17,344	20,891
Wheat	43,113	14,930	17,344	20,206
Wheat (PL 480)	4,517	2,298	0	294
Wheat flour	1,034	902	0	644
Wheat flour (PL 480)	1,034	902	0	644
Fruits and vegetables	879	797	985	4
Tobacco	75	50	237	178
Cotton	188	0	2,519	2,558
Tallow, inedible	1,941	1,287	1,563	1,953
Soybean oil	1,658	1,782	0	439
Soybean oil (PL 480)	1,658	1,777	0	439
Other agricultural exports	189	49	55	47
Total agricultural exports	49,907	21,029	22,703	26,993
Nonagricultural exports	16,742	11,637	30,136	36,788
Total exports	66,649	32,666	52,839	63,781

Source: U.S. Bureau of the Census.

Table 9.--U.S. imports from Algeria, 1966-69

Commodity	1966	1967	1968	1969
	- - - - - - - - 1,000 dollars - - - - - - - -			
ices	3	13	5	0
sential oils	86	173	197	293
her agricultural imports	112	10	6	10
otal agricultural imports	201	196	208	303
nagricultural imports	2,754	2,884	5,054	1/1,997
Total imports	2,955	3,080	5,262	1/2,300

1/ Preliminary.
Source: U.S. Bureau of the Census.

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

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